Marshall Cavendish Education

4A

PRIMARY MATHEMATICS

Standards Edition

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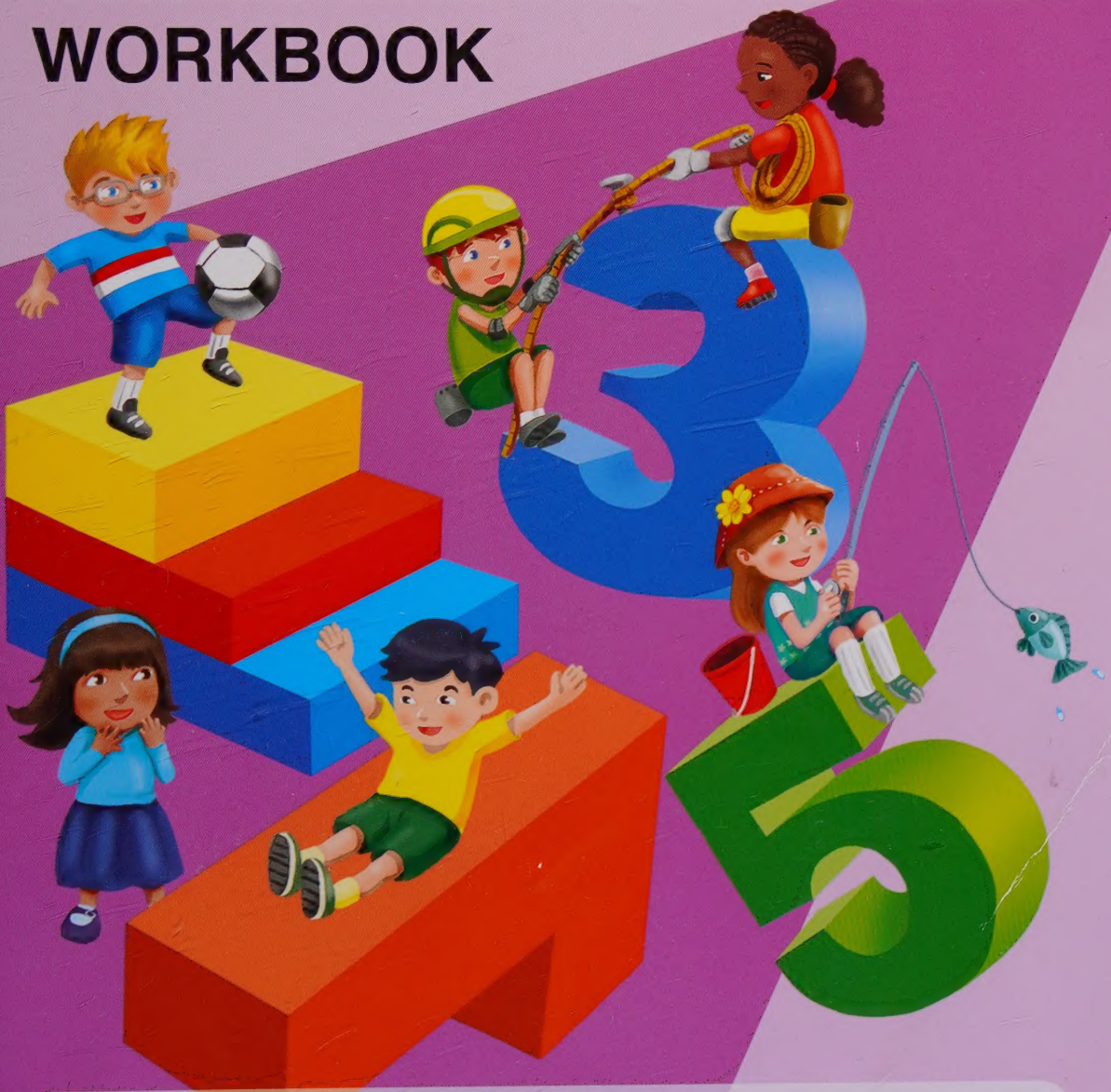

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4A

PRIMARY MATHEMATICS

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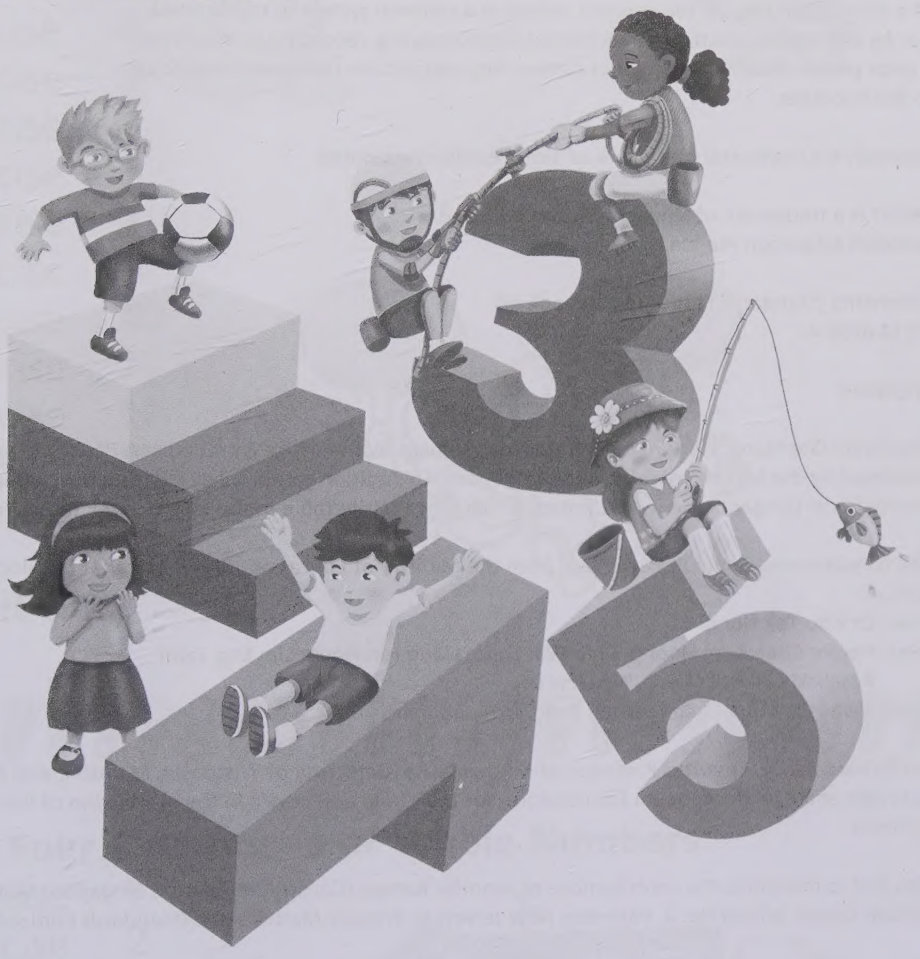

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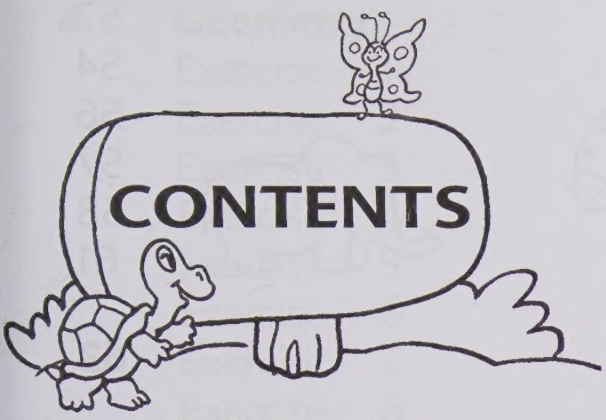

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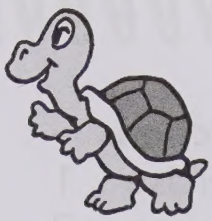

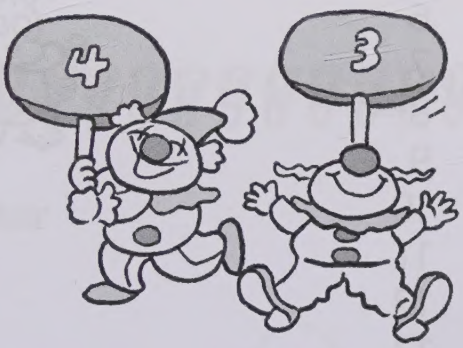

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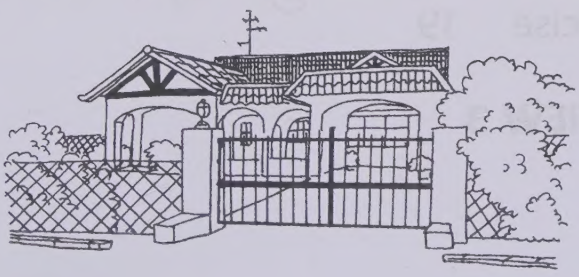

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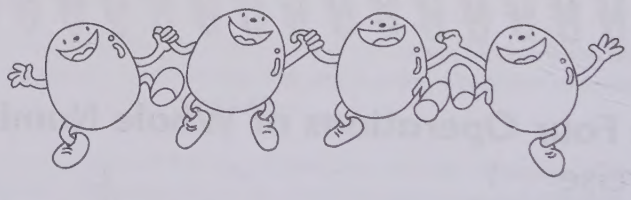

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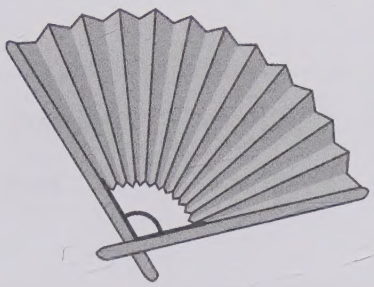

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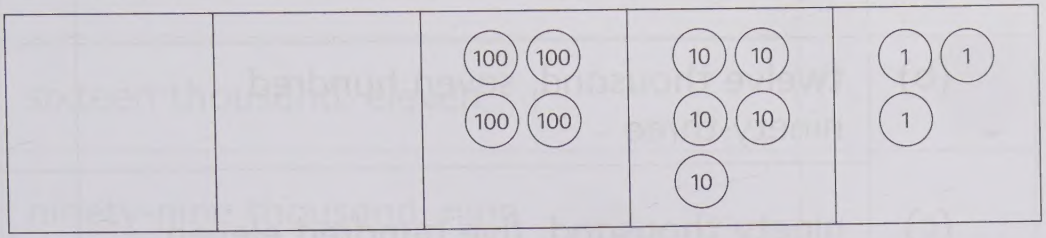
EXERCISE 1

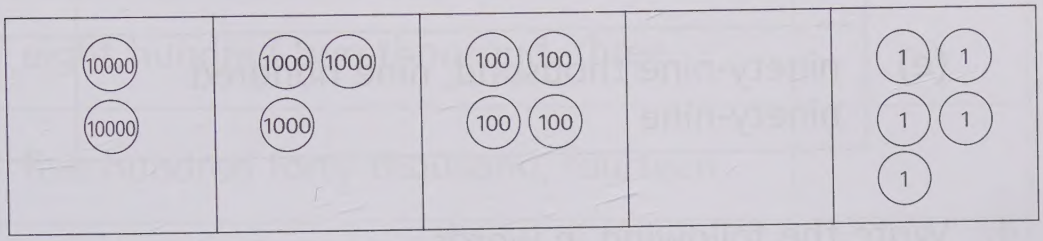
1. Write the numbers in figures.

(a)



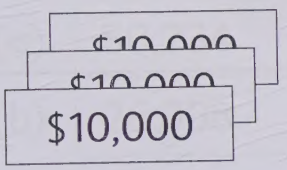
The number is _____.

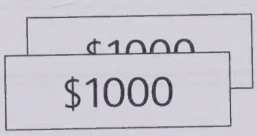
(b)

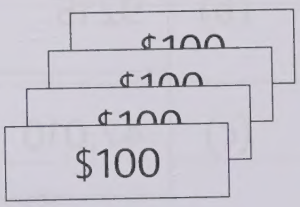


The number is _____.

2. Mr. Royce sold his car for this amount of money.







(a) Write the amount of money in figures.

_____

(b) Write the amount of money in words.

_____

3. Write the following in figures.

(a)	eight thousand, four hundred two	
(b)	twelve thousand, seven hundred ninety-three	
(c)	ninety thousand, five hundred eleven	
(d)	eighty-eight thousand, eight	
(e)	ninety-nine thousand, nine hundred ninety-nine	

4. Write the following in words.

(a)	2080	
(b)	9215	
(c)	47,010	
(d)	89,102	
(e)	40,900	
(f)	78,999	

5. Write the following in figures.

(a)	twenty-four thousand, six hundred eight	
(b)	sixteen thousand, eleven	
(c)	ninety-nine thousand, nine	
(d)	three hundred twelve thousand, four hundred sixty	
(e)	eight hundred two thousand, three	
(f)	five hundred forty thousand, fourteen	
(g)	nine hundred thousand, nine hundred nine	

6. Write the following in words.

(a)	50,234	
(b)	26,008	
(c)	73,506	
(d)	367,450	
(e)	506,009	
(f)	430,016	
(g)	800,550	

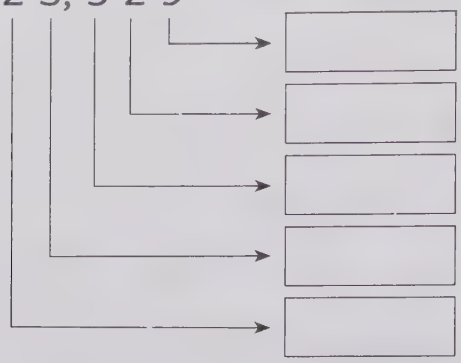
7. Write 957,005 in expanded form.

_____

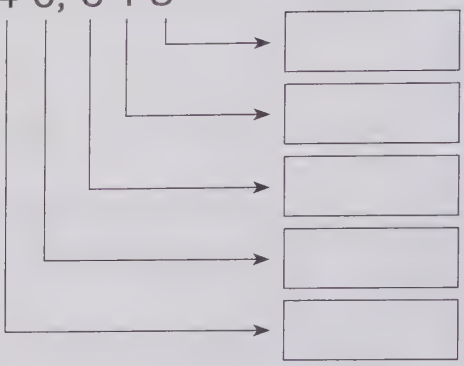
EXERCISE 2

1. Write the values of the digits in each of the following numbers.

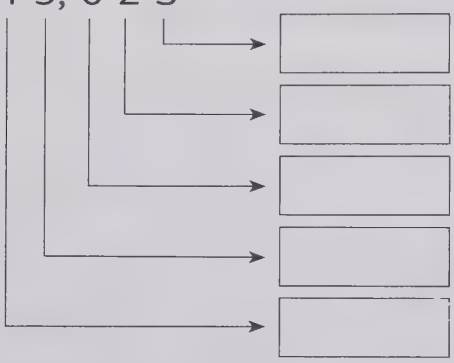
(a) 2 3, 5 2 9



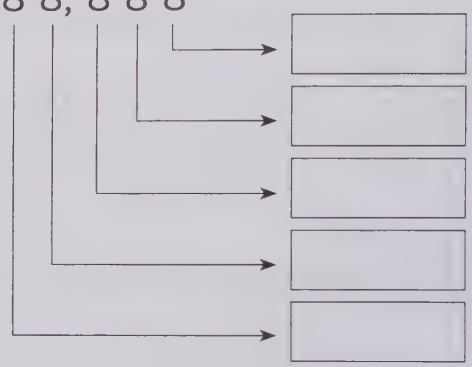
(b) 4 0, 6 1 8



(c) 4 5, 0 2 3



(d) 8 8, 8 8 8



Fill in the blanks.

2.

Ten thousands	Thousands	Hundreds	Tens	Ones
7	**8**	**2**	**4**	**3**

(a) In **7**8,243, the digit **7** stands for _____.

(b) In 78,243, the digit _____ is in the **hundreds** place.

The value of the digit is _____.

(c) In 78,243, the **tens** digit is _____ and

the **thousands** digit is _____.

3. (a) In **2**4,568, the digit **4** stands for _____.

(b) In 43,251, the digit _____ is in the **ten thousands** place.

(c) In 30,**5**64, the value of the digit **5** is _____.

4. (a) 5623 = 5000 + 600 + 20 + _____

(b) 16,048 = 10,000 + _____ + 40 + 8

(c) 40,180 = _____ + 100 + 80

(d) 72,005 = 70,000 + _____ + 5

(e) 63,100 = 63,000 + _____

5. (a) 4000 + 300 + 7 = _____

(b) 50,000 + 6000 + 400 = _____

(c) 30,000 + 700 + 60 + 8 = _____

(d) 10,000 + 1000 + 400 = _____

(e) 90,000 + 90 = _____

6. (a) In 2**7**,685, the digit **7** stands for _____.

   (b) In 61,260, the digit _____ is in the **ten thousands** place.

   The value of the digit is _____.

   (c) In 432,**0**91, the digit **0** is in the _____ place.

   (d) In 368,5**4**0, the value of the digit **4** is _____.

7. (a) 40,000 + 2000 + 100 + 8 = _____

   (b) 562,000 + 32 = _____

   (c) 700,000 + 70,000 + 70 + 7 = _____

   (d) 900,000 + 214 = _____

8. (a) 25,830 = 25,000 + _____ + 30

   (b) 370,049 = _____ + 70,000 + 40 + 9

   (c) 603,804 = 600,000 + _____ + 800 + 4

   (d) 416,008 = 416,000 + _____

EXERCISE 3

1. Write the following in figures.

(a)	three million	
(b)	four million, one hundred fifty thousand	
(c)	six million, thirty-one thousand	
(d)	seven million, two hundred eight thousand	
(e)	five million, five thousand	
(f)	ninety-five million, nine hundred nine thousand	
(g)	seven hundred ten million	

2. Write the following in words.

(a) 4,000,000

(b) 6,350,000

(c) 308,567,000

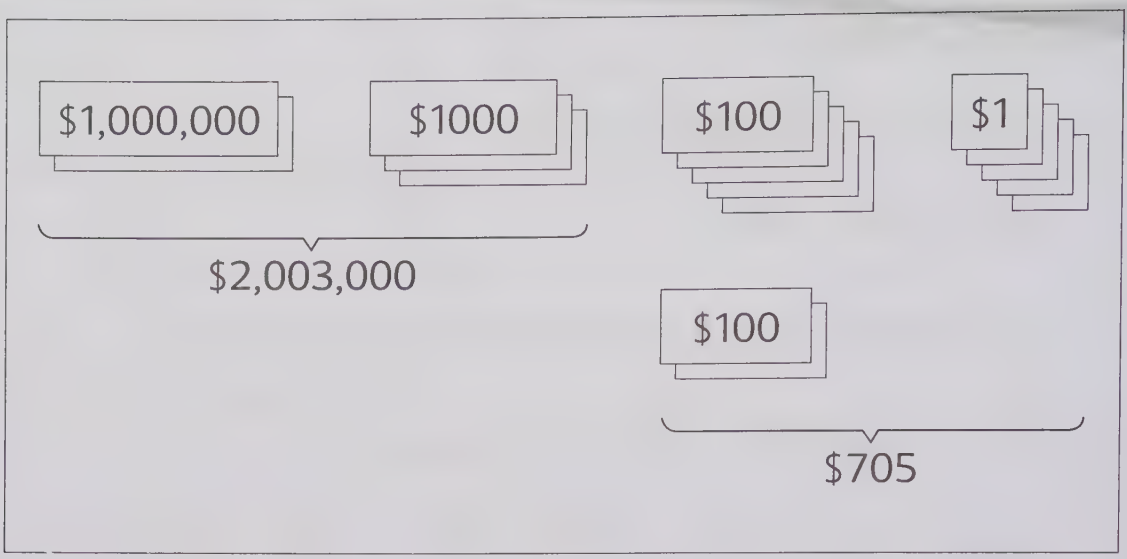
(d) 17,703,000

(e) 3,040,000

(f) 5,006,000

(g) 149,099,000

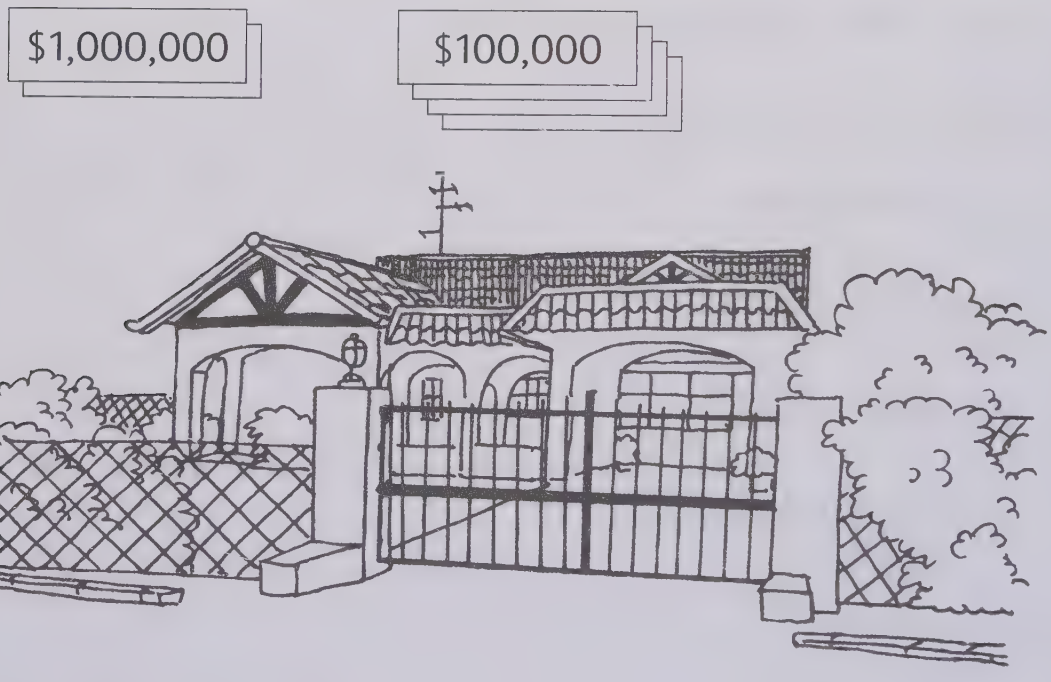
3.



Write the total amount of money in figures. _____

In words, it is _____.

4. Mr. Wayne bought a house with this amount of money.



Write the price of the house in figures. _____

In words, it is _____.

EXERCISE 4

Fill in the blanks.

1. (a) _____ is 1000 more than 42,628.
   (b) 263,240 is 10,000 more than _____.
   (c) _____ is 100 less than 90,000.
   (d) 86,000,000 is 100,000 less than _____.
   (e) 45,600 is _____ more than 45,500.
   (f) 384,000 is _____ less than 394,000.
   (g) 29,409 + _____ = 30,409
   (h) 2,483,000 − _____ = 2,482,000

2. (a) 37,526 is _____ more than 37,000.
   (b) 37,526 is _____more than 7526.

3. Complete the following regular number patterns.
   (a) 35,552, _____, _____, 38,552, 39,552
   (b) 71,680, 71,780, _____, 71,980, _____
   (c) 283,610, 293,610, _____, _____, 323,610

4. (a) Which is greater, 13,268 or 31,862? _____

   (b) Which is smaller, 49,650 or 42,650? _____

   (c) Which is the greatest, 33,856, 33,786 or 33,796? _____

   (d) Which is the smallest, 65,730, 65,703 or 66,730? _____

5. Arrange the numbers in increasing order.

   (a) 3695, 3956, 35,096, 30,965

   _____

   (b) 435,760, 296,870, 503,140, 462,540

   _____

EXERCISE 5

1. Add.

(a)	7000 + 9000 =
(b)	23,000 + 14,000 =
(c)	18,000 + 6000 =

2. Subtract.

(a)	13,000 – 4000 =
(b)	46,000 – 12,000 =
(c)	32,000 – 8000 =

3. Multiply.

(a)	3000 × 2 =
(b)	8000 × 6 =
(c)	7000 × 9 =

4. Divide.

(a)	$8000 \div 4 =$
(b)	$72{,}000 \div 6 =$
(c)	$6000 \div 2 =$

5. Find the number represented by each n.

(a) $29{,}000 + n = 41{,}000$	(b) $n + 24{,}000 = 70{,}000$
(c) $54{,}000 - n = 33{,}000$	(d) $n - 16{,}000 = 24{,}000$
(e) $40{,}000 \times n = 120{,}000$	(f) $n \times 5 = 40{,}000$
(g) $15{,}000 \div n = 3000$	(h) $n \div 8 = 7000$

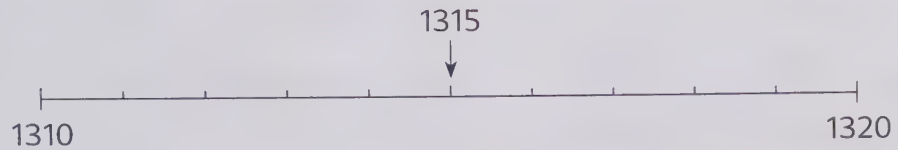
EXERCISE 6

Fill in the blanks.

1. (a)

297 is _____ when rounded to the nearest ten.

(b)

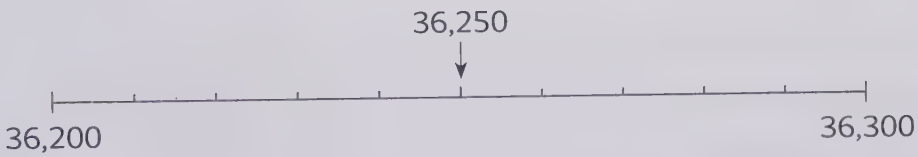


1315 is _____ when rounded to the nearest ten.

2. (a)

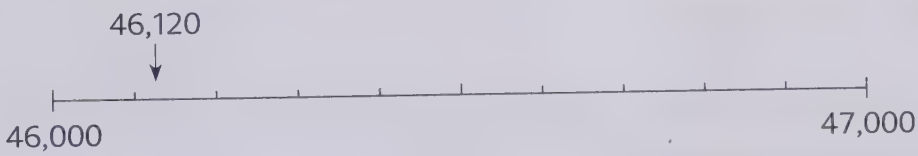
5982 is _____ when rounded to the nearest hundred.

(b)



36,250 is _____ when rounded to the nearest hundred.

3. (a)



46,120 is _____ when rounded to the nearest thousand.

(b)

235,870 is _____ when rounded to the nearest thousand.

4. (a) 245,230 is _____ when rounded to the nearest thousand.

   (b) 247,826 is _____ when rounded to the nearest thousand.

5. (a) 43,192 is _____ when rounded to the nearest ten.

   (b) 14,563 is _____ when rounded to the nearest hundred.

   (c) 82,926 is _____ when rounded to the nearest thousand.

   (d) 1,964,250 is _____ when rounded to the nearest hundred thousand.

   (e) 19,834,000 is _____ when rounded to the nearest million.

6. Round each of the following to the nearest ten thousand dollars.

   (a) $438,500 _____ (b) $525,000 _____

   (c) $2,608,600 _____ (d) $3,974,500 _____

   (e) $5,990,400 _____ (f) $6,226,300 _____

7. Round each of the following to the nearest hundred thousand dollars.

   (a) $3,098,000 _____ (b) $5,672,000 _____

   (c) $18,296,000 _____ (d) $24,983,000 _____

   (e) $43,825,000 _____ (f) $48,930,000 _____

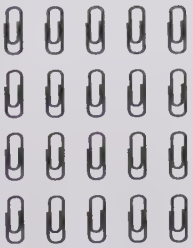
   (g) $328,500,000 _____ (h) $693,489,000 _____

EXERCISE 7

1. Write down the factors of 20.

$1 \times 20 = 20$

$2 \times 10 = 20$



$4 \times 5 = 20$

The factors of 20 are _____, _____, _____,

_____, _____ and _____.

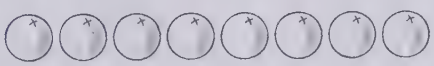
2. Fill in the blanks.

(a)

$2 \times 6 = 12$

_____ and _____ are factors of 12.

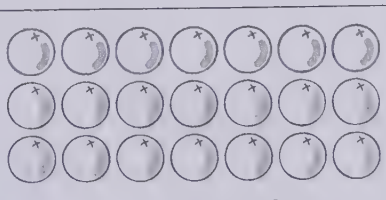
(b)



$1 \times 8 = 8$

_____ and _____ are factors of 8.

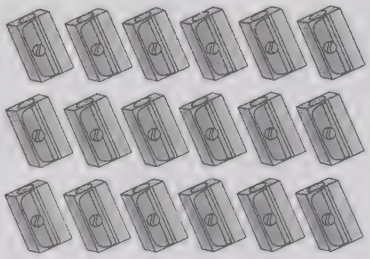
(c)



$3 \times 7 = 21$

_____ and _____ are factors of 21.

3. Find the missing factors.

(a) $2 \times$ _____ $= 8$	(b)  _____ $\times 6 = 18$
(c) $5 \times$ _____ $= 45$	(d) $6 \times$ _____ $= 48$
(e) $7 \times$ _____ $= 56$	(f) $9 \times$ _____ $= 72$
(g) _____ $\times 4 = 36$	(h) _____ $\times 6 = 54$
(i) _____ $\times 7 = 70$	(j) _____ $\times 8 = 64$

4. Fill in the blanks.

(a) $8 = 1 \times$ _____

$8 = 2 \times$ _____

The factors of 8 are _____, _____, _____ and _____.

(b) $15 = 1 \times$ _____

$15 = 3 \times$ _____

The factors of 15 are _____, _____, _____ and _____.

5. Which of the following are prime numbers?

16	27	13	19	21

EXERCISE 8

1.

(a) Is 2 a factor of 35?	(b) Is 3 a factor of 45?
$2\overline{)35}$	$3\overline{)45}$

2. Write **Yes** or **No**.

Number	Is 3 a factor of the number?	Is 4 a factor of the number?	Is 5 a factor of the number?
30	**Yes**	**No**	**Yes**
36			
48			
60			
75			
84			

3. (a) Is 4 a common factor of 36 and 60?

$4\overline{)36}$ $4\overline{)60}$

(b) Is 4 a common factor of 48 and 90?

(c) Is 6 a common factor of 30 and 78?

4. Find the factors of each of the following numbers.

(a) 64

$64 = 1 \times 64$ $64 = 4 \times 16$

$64 = 2 \times 32$ $64 = \_\_ \times \_\_$

The factors of 64 are _____.

(b) 72

(c) 84

5. Write the missing factors. Use only prime numbers.

(a) $64 = 2 \times 8 \times$ _____ $\times$ _____

(b) $84 = 6 \times$ _____ $\times$ _____

(c) $45 =$ _____ $\times$ _____ $\times 5$

(d) $72 =$ _____ $\times 4 \times$ _____ $\times$ _____

6. Find the missing factors represented by n.

(a) $24 = 3 \times 2 \times n$	(b) $18 = 3 \times n \times 2$
(c) $25 \times 4 = 5 \times n \times 4$	(d) $21 \times 20 = 21 \times 2 \times n$
(e) $3 \times 32 = 6 \times n$	(f) $16 \times 2 = n \times 4$

EXERCISE 9

1. Fill in the blanks.

(a)

_____ is the first multiple of 6.

_____ is the second multiple of 6.

_____ is the third multiple of 6.

_____ is the fourth multiple of 6.

(b)

The first five multiples of 7 are _____, _____,

_____, _____ and _____.

2. Write the next five multiples for each number.

Number	Multiples
2	2, 4,
3	3, 6,
4	4, 8,
6	6, 12,
8	8, 16,
10	10, 20,

3. Fill in the blanks.

(a) Multiples of 3 : 3, (6), 9, (12), 15, 18, ...

Multiples of 2 : 2, 4, (6), 8, 10, (12), ...

The first two common multiples of 3 and 2 are _____ and _____.

(b) Multiples of 8 : 8, 16, 24, 32, ...

Multiples of 4 : 4, 8, 12, 16, ...

The first two common multiples of 8 and 4 are _____ and _____.

(c) Multiples of 9 : _____

Multiples of 6 : _____

The first two common multiples of 9 and 6 are _____ and _____.

(d) Multiples of 8 : _____

Multiples of 6 : _____

The first two common multiples of 8 and 6 are _____ and _____.

EXERCISE 10

Find the value of each of the following expressions.

1.

(a) $8 + 12 + 20$	(b) $40 - 14 - 9$
(c) $26 + 8 - 9$	(d) $21 - 5 + 8$
(e) $3 \times 5 \times 8$	(f) $36 \div 3 \div 4$
(g) $4 \times 9 - 3$	(h) $64 \div 8 \times 5$

2.

(a) $24 \div 6 \times 8$	(b) $140 - 40 \times 3$
(c) $46 + 32 \div 8$	(d) $100 - 60 \div 4$
(e) $8 \times 6 + 14$	(f) $12 + 18 \div 6$
(g) $6 \times 10 - 5$	(h) $72 + 6 \times 6$

3.

(a) $20 + 4 \div 4 - 4$	(b) $6 \times 2 - 10 \div 5$
(c) $80 - 36 \div 4 \times 3$	(d) $32 + 8 + 10 \times 2$
(e) $52 - 35 \div 7 - 7 \times 2$	(f) $9 \times 8 - 6 \times 10$
(g) $7 \times 8 + 24 \div 8$	(h) $63 \div 9 + 20 \div 10$

EXERCISE 11

Find the value of the following expressions.

1.

(a) $9 + (26 - 15)$	(b) $90 - (4 + 6)$
(c) $12 - (10 - 8)$	(d) $(31 - 20) - 8$
(e) $8 \times (3 \times 2)$	(f) $20 \div (4 \div 2)$
(g) $9 \times (15 \div 3)$	(h) $15 \div (5 \times 3)$

2.

(a) $(9 + 6) \div 5$	(b) $2 \times (9 - 4)$
(c) $12 \div (8 - 6)$	(d) $(4 + 6) \times 5$
(e) $10 \times (15 \div 5)$	(f) $(51 - 44) \div 7$
(g) $72 \div (9 - 3)$	(h) $(28 - 18) \times 10$

3.

(a) $20 + (8 + 4) \div 3$	(b) $16 + (9 - 3) \times 5$
(c) $3 \times (4 + 2) \div 2$	(d) $7 \times (13 - 6) - 19$
(e) $60 + (18 + 7) \div 5$	(f) $8 \times (11 - 8) \div 6$
(g) $24 \div 6 + 3 \times (6 - 4)$	(h) $10 + (28 - 8) \div 5 \times 2$

EXERCISE 12

1. Write a single expression that can be used to find the answer for each of the following. Then solve.

   (a) Jamie had 50 beads. She used 32 to make a necklace. She then bought 18 more beads. Find out how many beads she had left.

   (b) Pat made 20 muffins. She and her friend ate 5 of them. She gave 10 muffins to her neighbors. Find out how many muffins she had left.

   (c) Sean had 15 baseball cards. Adam had twice that number of cards. Adam bought 10 more cards. Find the number of cards that Adam has now.

2. Check (✔) each equation that is true.

(a) $24 = 3 \times 8$ ☐

(b) $9 \times 11 = 88$ ☐

(c) $8 + 35 = (3 \times 5) + 8$ ☐

(d) $16 - 9 = (7 \times 8) - 49$ ☐

(e) $(1 \times 5) \times 10 = 5 \times 10$ ☐

(f) $8 + 6 = (2 \times 3) + (5 \times 2)$ ☐

(g) $(20 \div 5) + 2 = (2 \times 4) - (1 \times 2)$ ☐

3. Insert parentheses to make the following equations true.

(a) $2 + 4 \div 2 = 3$

(b) $6 - 2 \times 3 = 0$

(c) $2 \times 4 - 3 + 2 = 7$

(d) $2 \times 4 - 3 + 2 = 4$

(e) $2 \times 4 - 3 + 2 = 3$

EXERCISE 13

1. The temperature on the surface of the moon in the middle of the night is 154 degrees Celsius below freezing. Write this as a negative number.

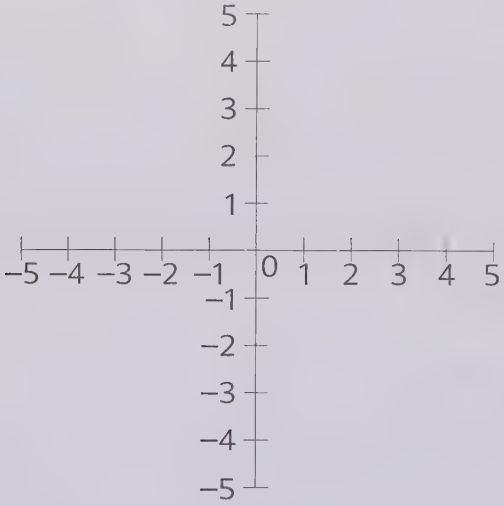
   _____

2. Write how much money each person has as positive or negative numbers.

   (a) Steven has fourteen dollars. _____

   (b) Marcy owes five dollars. _____

   (c) Karen owes twelve dollars. _____

3. 

   (a) List the negative numbers on the number lines shown above.

   _____

   (b) Are negative numbers shown to the left or to the right of the 0?

   _____

   (c) Are positive numbers shown above or below the 0?

   _____

4.

−5	−4	−3	−2	−1	0	1	2	3	4	5

Sam is playing a computer game.

He has to use the (+) key to make the frog jump to the right and the (−) key to make the frog jump to the left.

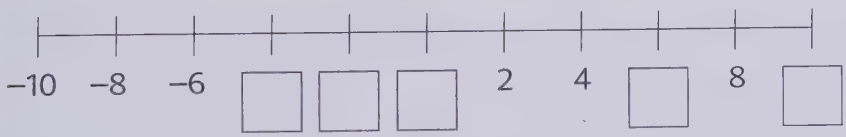
Then he presses a number key to show how far it should jump.

For example, to make the frog jump from −3 to 0, Sam presses the keys (+) and (3).

Fill in the table to show where the frog would end up.

	Starting position	Keys pressed	Ending position
(a)	0	−2	
(b)	0	+2	
(c)	−1	+2	
(d)	3	−3	
(e)	−1	−2	
(f)	−4	+2	

5. Fill in the missing numbers.



EXERCISE 14

1. Fill in each ◯ with **>** or **<**.

   (a) 4 ◯ −3

   (b) −6 ◯ 6

   (c) −7 ◯ 0

   (d) −2 ◯ −1

   (e) −99 ◯ −98

   (f) −20 ◯ −10

   (g) 50 ◯ −50

   (h) 0 ◯ −100

2. Circle the smallest number.

   (a) 0, −5, 1

   (b) −99, −1, 100

   (c) 7, −8, 9, −10

   (d) 1, −2, 3, −4

3. Arrange the numbers in increasing order.

   (a) 0, −5, 4, −8

   _____

   (b) −1, −15, 2, 1

   _____

   (c) 10, −9, 8, −7

   _____

   (d) 99, −99, −100, 100

   _____

4. Arrange the numbers in decreasing order.

   (a) 10, −14, 4, −5

   _____

   (b) 1, 0, −2, −4

   _____

   (c) 20, −30, 40, −50

   _____

   (d) −5, −9, −7, −12

   _____

5. Fill in the blanks.

   (a) _____ is 2 more than −10.

   (b) _____ is 2 less than −10.

   (c) _____ is 1 less than −1.

   (d) _____ is 1 more than −8.

   (e) _____ is 2 less than 0.

   (f) _____ is 1 less than −99.

REVIEW 1

1. Write the following in standard form.
   (a) 14 thousands 6 tens
   (b) 26 thousands 8 ones
   (c) 10 millions 32 thousands 5 hundreds 2 tens
   (d) 4 hundred thousands 6 tens 9 ones
   (e) 59 millions 4 hundreds

2. Write the following in words and in expanded form.
   (a) 500,006

   _____

   _____

   (b) 34,004,120

   _____

   _____

   (c) 12,025

   _____

   _____

3. (a) In 1,782,430, the digit _____ is in the hundred thousands place.

   The value of the digit is _____.

   (b) In 26,4**0**9, the digit **0** is in the _____ place.

   (c) In 287,451 the hundreds digit is _____ and the hundred thousands digit is _____.

4. Find the missing numbers.

   (a) $5 \times 24 = 5 \times 6 \times$ _____

   (b) $2 \times 180 = 4 \times$ _____

   (c) $16 + 2 \times$ _____ $= 20$

   (d) $48 \div (4 \times 2) - 2 = 2 \times$ _____

5. A number rounded to the nearest thousand is 454,000. What is the smallest value this number could have?

   _____

6. Is 6 a factor of 4598? _____

7. List the factors of 54. _____

8. Find a prime number between 25 and 30. _____

9. Find the first two common multiples of 4 and 5. _____

10. Arrange the numbers in increasing order.

    (a) 435, 260, 296, 870, 503, 140, 463, 540

    _____

    (b) −22, 21, 20, −19, 18, −17, −16

    _____

EXERCISE 1

1. Find the sum of each of the following.

(a) $\begin{array}{r} 7243 \\ +\ 652 \\ \hline \end{array}$	(b) $\begin{array}{r} 2357 \\ +\ 652 \\ \hline \end{array}$	(c) $\begin{array}{r} 6407 \\ +\ 2547 \\ \hline \end{array}$
(d) $\begin{array}{r} 1816 \\ +\ 1238 \\ \hline \end{array}$	(e) $\begin{array}{r} 1246 \\ +\ 9798 \\ \hline \end{array}$	(f) $\begin{array}{r} 9388 \\ +\ 2666 \\ \hline \end{array}$
(g) $\begin{array}{r} 4261 \\ +\ 9793 \\ \hline \end{array}$	(h) $\begin{array}{r} 7945 \\ +\ 6355 \\ \hline \end{array}$	(i) $\begin{array}{r} 8509 \\ +\ 9983 \\ \hline \end{array}$
(j) $\begin{array}{r} 7569 \\ +\ 9285 \\ \hline \end{array}$	(k) $\begin{array}{r} 6606 \\ +\ 3409 \\ \hline \end{array}$	(l) $\begin{array}{r} 5739 \\ +\ 3473 \\ \hline \end{array}$

2. Find the difference of each of the following.

(a) 5678 − 1234	(b) 8432 − 976	(c) 5123 − 1234
(d) 3000 − 2874	(e) 9001 − 128	(f) 6060 − 3687
(g) 5262 − 4908	(h) 1006 − 897	(i) 9022 − 1134
(j) 4200 − 1532	(k) 1982 − 999	(l) 7258 − 6189

EXERCISE 2

Add.

1.

(a) 8 + 2 = 28 + 2 = 328 + 2 = 6328 + 2 =	(b) 4 + 6 = 54 + 6 = 254 + 6 = 3254 + 6 =
(c) 70 + 30 = 570 + 30 = 1070 + 30 = 2570 + 30 =	(d) 39 + 61 = 439 + 61 = 2039 + 61 = 5439 + 61 =
(e) 600 + 400 = 2600 + 400 =	(f) 827 + 173 = 5827 + 173 =

2.

(a) 2457 + 4 =
(b) 2839 + 6 =
(c) 3548 + 5 =

Subtract.

3.

(a) $10 - 6 =$ $40 - 6 =$ $250 - 6 =$ $5230 - 6 =$	(b) $10 - 9 =$ $100 - 9 =$ $1000 - 9 =$ $2000 - 9 =$
(c) $100 - 72 =$ $500 - 72 =$ $1000 - 72 =$ $2100 - 72 =$	(d) $100 - 99 =$ $400 - 99 =$ $2100 - 99 =$ $3000 - 99 =$
(e) $1000 - 840 =$ $2000 - 840 =$	(f) $1000 - 999 =$ $3000 - 999 =$

4.

(a) $2570 - 68 =$
(b) $3410 - 9 =$
(c) $3520 - 17 =$

EXERCISE 3

Add.

1.

(a) 3890 + 14 =
(b) 3598 + 42 =
(c) 4264 + 38 =

2.

(a) 2700 + 324 =
(b) 2997 + 203 =
(c) 2998 + 275 =

3.

(a) 1582 + 9 =	(b) 2756 + 8 =
1582 + 99 =	2756 + 98 =
1582 + 999 =	2756 + 998 =

Subtract.

4.

(a) 2100 – 80 =
(b) 2700 – 98 =
(c) 3200 – 54 =
(d) 3900 – 99 =
(e) 4200 – 98 =

5.

(a) 3000 – 400 =
(b) 3000 – 750 =
(c) 3000 – 530 =
(d) 3000 – 999 =
(e) 4000 – 998 =

6. Write the missing numbers.

(a) 2543 $\xrightarrow{+60}$ ☐ $\xrightarrow{+8}$ ☐

2543 + 68 = ☐

(b) 3276 $\xrightarrow{+2000}$ ☐ $\xrightarrow{+40}$ ☐

3276 + 2040 = ☐

(c) 3524 $\xrightarrow{-600}$ ☐ $\xrightarrow{-30}$ ☐

3524 − 630 = ☐

(d) 4261 $\xrightarrow{-2000}$ ☐ $\xrightarrow{-500}$ ☐

4261 − 2500 = ☐

7. Add.

(a) 4285 + 340 =
(b) 5356 + 2070 =

8. Subtract.

(a) 3423 − 607 =
(b) 5697 − 2700 =

EXERCISE 4

1. Round each number to the nearest hundred.
   Then estimate the value of each of the following.

(a)	319	+	589		
	↓		↓		
	300	+	600	=	
(b)	782	−	509		
	↓		↓		
	800	−	500	=	
(c)	792	+	204		
	↓		↓		
	☐	+	☐	=	
(d)	903	−	288		
	↓		↓		
	☐	−	☐	=	
(e)	612	+	589		
	↓		↓		
	☐	+	☐	=	
(f)	892	−	328		
	↓		↓		
	☐	−	☐	=	
(g)	1798	+	416		
	↓		↓		
	☐	+	☐	=	
(h)	2304	−	996		
	↓		↓		
	☐	−	☐	=	

2. Round each number to the nearest hundred.
Then estimate the value of each of the following.

(a)	296	+	109	+	394			
	↓		↓		↓			
	300	+	100	+	400	=		
(b)	704	−	196	−	312			
	↓		↓		↓			
	☐	−	☐	−	☐	=		
(c)	998	−	194	+	97			
	↓		↓		↓			
	☐	−	☐	+	☐	=		
(d)	499	+	301	−	294			
	↓		↓		↓			
	☐	+	☐	−	☐	=		
(e)	1992	−	607	+	489			
	↓		↓		↓			
	☐	−	☐	+	☐	=		
(f)	2409	+	593	−	708			
	↓		↓		↓			
	☐	+	☐	−	☐	=		
(g)	1109	−	98	+	392			
	↓		↓		↓			
	☐	−	☐	+	☐	=		
(h)	3012	+	996	+	402			
	↓		↓		↓			
	☐	+	☐	+	☐	=		

EXERCISE 5

1. Sarah has 4670 European stamps. She has 698 more African stamps than European stamps. How many stamps does she have altogether?

---

2. Mr. Charles drove 325 miles on Saturday. He drove 49 miles less on Saturday than on Sunday. How many miles did he travel on the two days?

3. Mrs. Charles wants to buy a piano which costs $3225. She has $1950 in her savings account and $625 in cash. How much more money does she need?

---

4. Mr. Mudley earned $2365 in January. He earned $375 more in February than in January. If he spent $4250 in the two months and saved the rest, how much did he save?

EXERCISE 6

1. Estimate and then multiply.

(a)

$$1893 \times 4$$

$$\downarrow$$

$$2000 \times 4 =$$

$$\begin{array}{r} 1893 \\ \times \quad 4 \\ \hline \end{array}$$

(b)

$$4036 \times 7$$

$$\downarrow$$

$$\square \times 7 =$$

$$\begin{array}{r} 4036 \\ \times \quad 7 \\ \hline \end{array}$$

(c)

$$5987 \times 8$$

$$\downarrow$$

$$\square \times 8 =$$

$$\begin{array}{r} 5987 \\ \times \quad 8 \\ \hline \end{array}$$

(d)

$$8195 \times 9$$

$$\downarrow$$

$$\square \times 9 =$$

$$\begin{array}{r} 8195 \\ \times \quad 9 \\ \hline \end{array}$$

EXERCISE 7

1. Estimate and then divide.

(a)

$$2475 \div 5$$
$$\downarrow$$
$$2500 \div 5 =$$

$$5\overline{)2475}$$

(b)

$$3594 \div 6$$
$$\downarrow$$
$$\square \div 6 =$$

$$6\overline{)3594}$$

(c)

$$4214 \div 7$$
$$\downarrow$$
$$\square \div 7 =$$

$$7\overline{)4214}$$

(d)

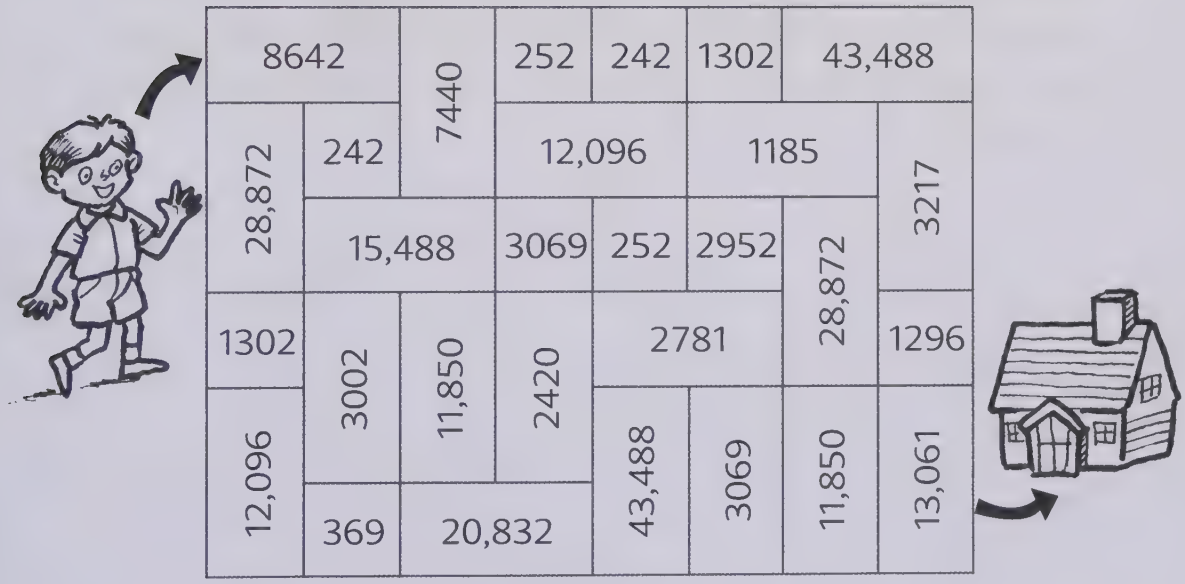
$$6480 \div 9$$
$$\downarrow$$
$$\square \div 9 =$$

$$9\overline{)6480}$$

2. Multiply or divide.

4032×3	2370×5	3208×9	7248×6
$4\overline{)5208}$	$3\overline{)9207}$	$8\overline{)1936}$	$10\overline{)2520}$

Color the spaces which contain the answers to the above. You will help David find his way home.



EXERCISE 8

1. A bottle contains red beads and white beads. The number of red beads is 3 times the number of white beads. If there are 1875 white beads, what is the total number of beads in the bottle?

---

2. The number of meat pies a baker made is 4 times the number of vegetable pies. If he made 4864 meat pies, how many more meat pies than vegetable pies did he make?

3. David bought 2 computers at $3569 each. He had $2907 left. How much money did he have at first?

---

4. 5 people shared a sum of money. 2 of them received $4356 each. The others received $3807 each. Find the sum of money.

EXERCISE 9

1. Fill in the blanks.

A car can travel 8 km on 1 liter of gas.		It can travel _____ km on 10 liters of gas.
1 tennis racket costs $34.		10 tennis rackets cost _____.
Justin bakes 586 buns every day.		He bakes _____ buns in 10 days.

2. Multiply.

26×10	38×10	582×10	749×10
68×3	68×30	40×5	40×50
436×4	436×40	670×8	670×80

EXERCISE 10

Multiply.

1.

(a) $36 \times 9 = 360 - 36$

$=$

$36 \times 10 = 360$

(b) $58 \times 99 = 5800 - 58$

$=$

$58 \times 100 = 5800$

(c) $69 \times 99 =$

(d) $99 \times 87 =$

2.

(a) $68 \times 50 = 34 \times 2 \times 50$

$= 34 \times 100$

$=$

$2 \times 50 = 100$

(b) $32 \times 25 = 8 \times 4 \times 25$

$= 8 \times 100$

$=$

$2 \times 50 = 100$

(c) $84 \times 25 =$

(d) $25 \times 56 =$

EXERCISE 11

1. Multiply.

(a)

$4 \times 3 = 12$

$40 \times 3 =$

$40 \times 30 =$

$4 \times 30 =$

$$\begin{array}{r} 40 \\ \times \quad 30 \\ \hline \end{array}$$

$400 \times 3 =$

$400 \times 30 =$

$$\begin{array}{r} 400 \\ \times \quad 30 \\ \hline \end{array}$$

$4 \times 300 =$

$40 \times 300 =$

$$\begin{array}{r} 300 \\ \times \quad 40 \\ \hline \end{array}$$

(b)

$6 \times 5 =$

$60 \times 5 =$

$60 \times 50 =$

$6 \times 50 =$

$$\begin{array}{r} 60 \\ \times \quad 50 \\ \hline \end{array}$$

$600 \times 5 =$

$600 \times 50 =$

$$\begin{array}{r} 600 \\ \times \quad 50 \\ \hline \end{array}$$

$6 \times 500 =$

$60 \times 500 =$

$$\begin{array}{r} 500 \\ \times \quad 60 \\ \hline \end{array}$$

2. Estimate and then multiply.

(a)

$$\begin{array}{ccccc} 52 & \times & 39 & & \\ \downarrow & & \downarrow & & \\ 50 & \times & 40 & = & \end{array}$$

$$\begin{array}{r} 52 \\ \times\ 39 \\ \hline \end{array}$$

(b)

$$\begin{array}{ccccc} 78 & \times & 33 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 78 \\ \times\ 33 \\ \hline \end{array}$$

(c)

$$\begin{array}{ccccc} 29 & \times & 87 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 29 \\ \times\ 87 \\ \hline \end{array}$$

(d)

$$\begin{array}{ccccc} 92 & \times & 71 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 92 \\ \times\ 71 \\ \hline \end{array}$$

3. Estimate and then multiply.

(a)

$$\begin{array}{ccccc} 218 & \times & 37 & & \\ \downarrow & & \downarrow & & \\ 200 & \times & 40 & = & \end{array}$$

$$\begin{array}{r} 218 \\ \times\ 37 \\ \hline \end{array}$$

(b)

$$\begin{array}{ccccc} 483 & \times & 59 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 483 \\ \times\ 59 \\ \hline \end{array}$$

(c)

$$\begin{array}{ccccc} 372 & \times & 64 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 372 \\ \times\ 64 \\ \hline \end{array}$$

(d)

$$\begin{array}{ccccc} 648 & \times & 78 & & \\ \downarrow & & \downarrow & & \\ \square & \times & \square & = & \end{array}$$

$$\begin{array}{r} 648 \\ \times\ 78 \\ \hline \end{array}$$

EXERCISE 12

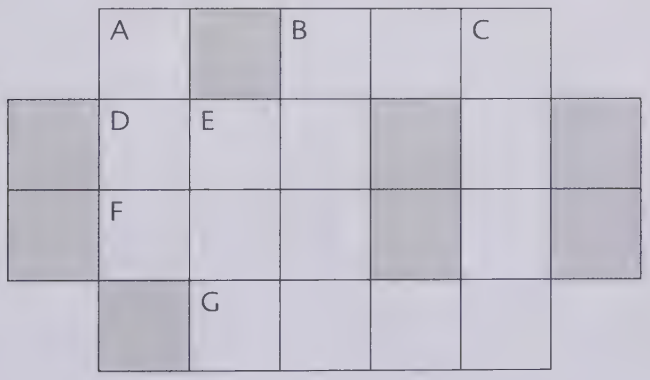
1. Multiply and use the answers to complete the cross-number puzzle below.

ACROSS

B	D	F	G
21×13	17×39	37×24	82×80

DOWN

A	B	C	E
28×31	53×45	59×60	49×14



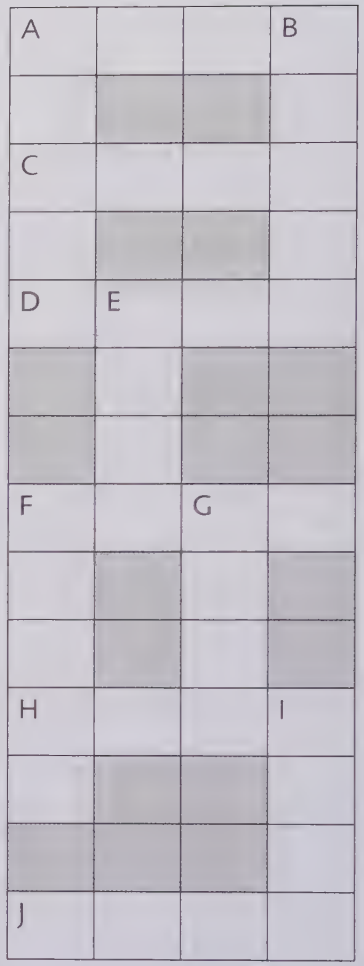
2. Multiply and use the answers to complete the cross-number puzzle.

ACROSS

A 118 × 23	C 249 × 31	D 329 × 18
F 167 × 17	H 138 × 11	J 249 × 25

DOWN

A 895 × 31	B 676 × 62	E 346 × 28
F 406 × 53	G 119 × 29	I 135 × 65



REVIEW 2

1. Write the following in figures.

   (a) fifty-five thousand, three hundred eighty-two _____

   (b) two hundred million, forty thousand, twelve _____

2. Write the following in words.

   (a) 28,740 _____

   (b) 35,084,000 _____

3. Write the missing numbers in the following regular number patterns.

   (a) _____, 48,615, 58,615, _____, 78,615

   (b) 9, 6, 3, _____, _____, _____, – 9

4. What is the missing number in each ☐ ?

   (a) 98,406 = 90,000 + ☐ + 400 + 6

   (b) 10,000 + 500 + 1 = ☐

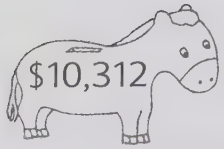
   (c) 67,014 = ☐ + 14

5. In 4**7**,158, the value of the digit **7** is _____.

6. (a) In 69,015, the digit _____ is in the hundreds place.

   (b) In 45, 032, 129, the digit 0 is in the _____ place.

7.

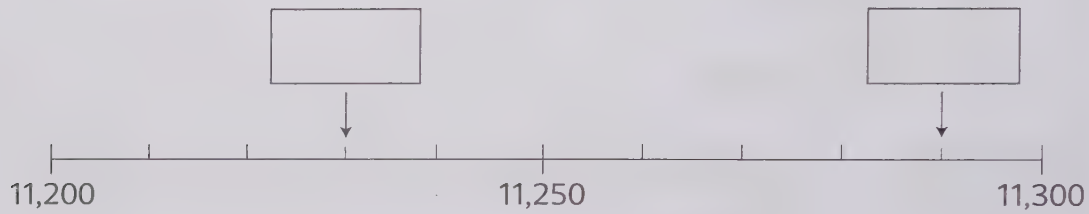


Holly's savings

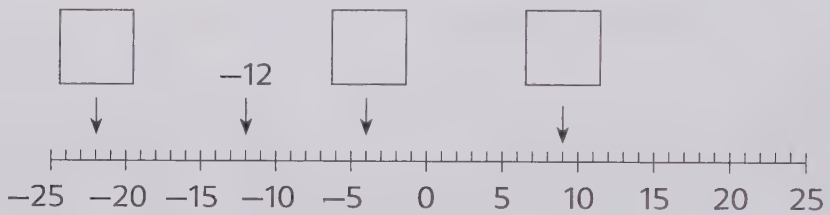
Leigh's savings

Holly saved $ ☐ more than Leigh.

8. (a) What number is each arrow pointing to?



(b)



9. Round off $90,350 to the nearest $100. _____

10. Write the factors of 36. _____

11. Write a prime number between 20 and 25. _____

12. Write down two common multiples of 6 and 10. _____

13. The product of two numbers is 216.
One of the numbers is 8.
What is the other number? _____

14. Fill in each ◯ with >, < or =.

(a) 9870 ◯ 18,970

(b) 17,548 + 4000 ◯ 116,200

(c) 2 × 5000 ◯ 10,000

(d) 4569 − 999 ◯ 3569 + 999

(e) 389 ◯ −398

(f) 7200 ÷ 8 ◯ 54,000 ÷ 6

15. (a) What number is 1 less than 0? _____

(b) What number is 1 more than −5? _____

(c) What number is 2 less than −10? _____

(d) What number is 2 more than −7? _____

16. A shopkeeper had 50 boxes of apples. There were 24 apples in each box. If he sold all the apples at 3 for $1, how much money did he receive?

17. 9600 people visited an art exhibition. There were twice as many adults as children. How many children were there?

18. Mr. Chen bought a computer and 5 boxes of CDs. He gave the cashier $2000 and received $15 change. If the computer costs $1860, find the cost of one box of CDs.

EXERCISE 1

1. Write the missing numerator in each of the following.

(a)

$\frac{1}{2} = \frac{\quad}{8}$

(b)

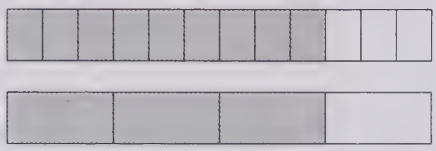
$\frac{6}{10} = \frac{\quad}{5}$

2. Write the missing denominator in each of the following.

(a)

$\frac{2}{3} = \frac{6}{\quad}$

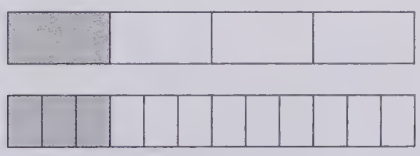
(b)



$\frac{9}{12} = \frac{3}{\quad}$

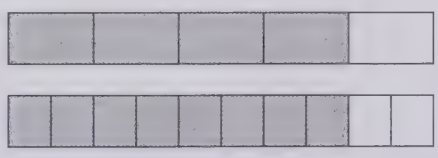
3. Write the equivalent fraction for each of the following.

(a)



$\frac{1}{4} =$

(b)

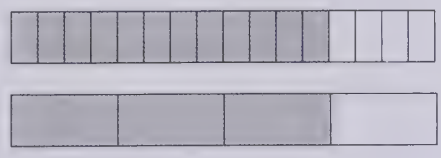


$\frac{4}{5} =$

(c)

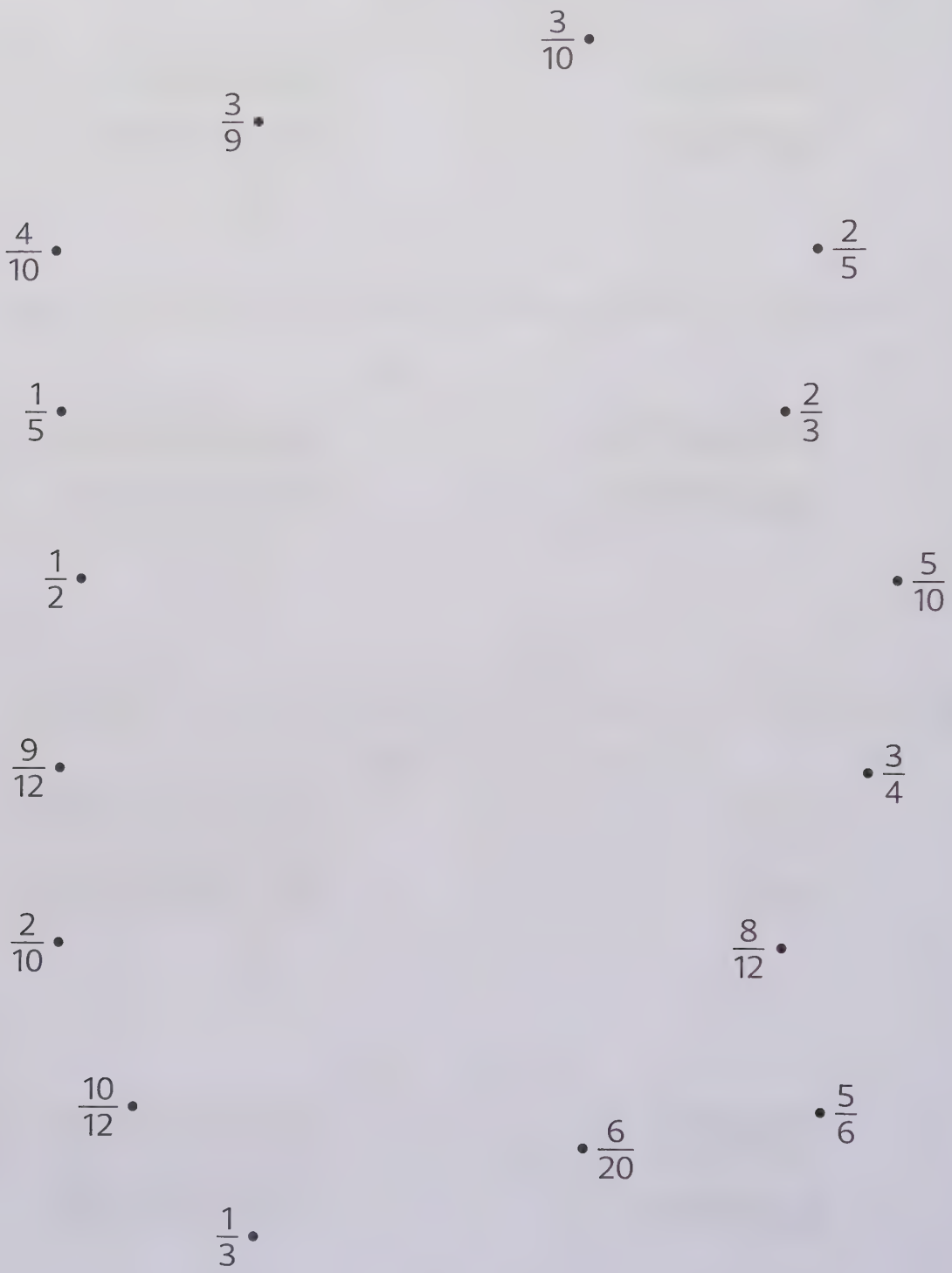
$\frac{6}{12} =$

(d)



$\frac{12}{16} =$

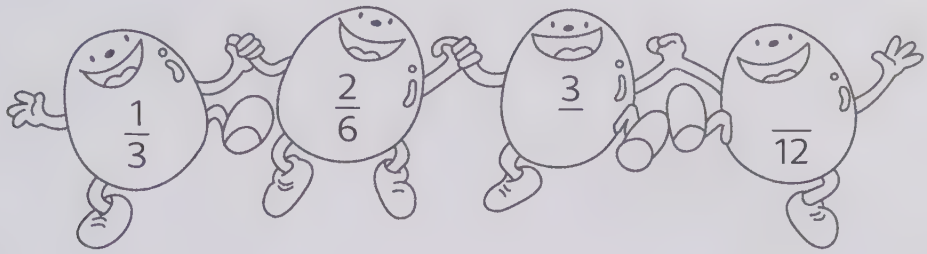
4. There are 8 pairs of equivalent fractions.
Join each pair with a straight line.
If you do it correctly, you will get four squares.



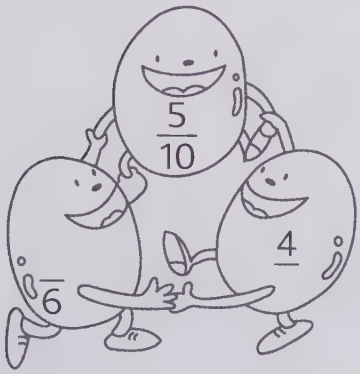
EXERCISE 2

1. Write the missing numerator and denominator in each set of equivalent fractions.

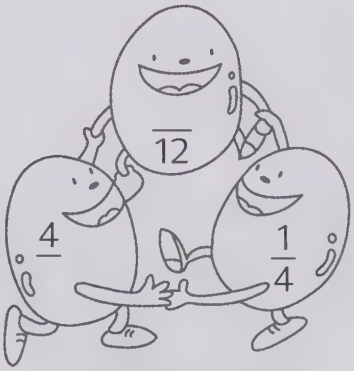
(a)



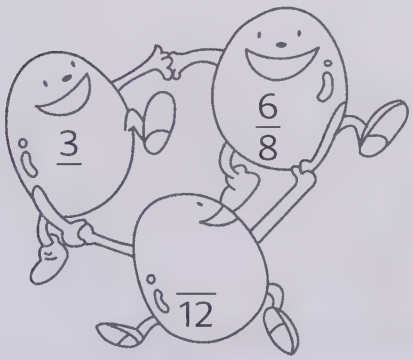
(b)



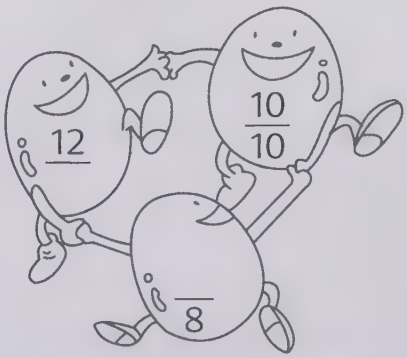
(c)



(d)



(e)



2. Write the missing numerator or denominator in each of the following.

(a) $\frac{2}{3} = \frac{\quad}{12}$

(b) $\frac{4}{5} = \frac{\quad}{10}$

(c) $\frac{6}{9} = \frac{2}{\quad}$

(d) $\frac{10}{12} = \frac{5}{\quad}$

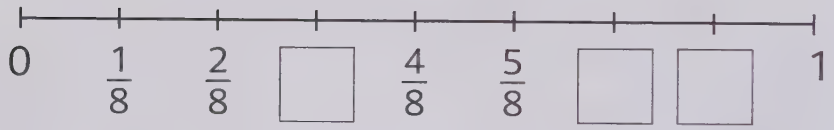
3. Express each of the following fractions in its simplest form.

(a) $\frac{9}{12} =$	(b) $\frac{8}{10} =$
(c) $\frac{10}{15} =$	(d) $\frac{9}{18} =$
(e) $\frac{8}{20} =$	(f) $\frac{18}{24} =$
(g) $\frac{12}{30} =$	(h) $\frac{20}{50} =$

4. Fill in the missing fractions.

(a)

(b)



5. Arrange the fractions in increasing order.

(a) $\frac{2}{5}$, $\frac{3}{10}$, $\frac{7}{10}$

_____

(b) $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{12}$

_____

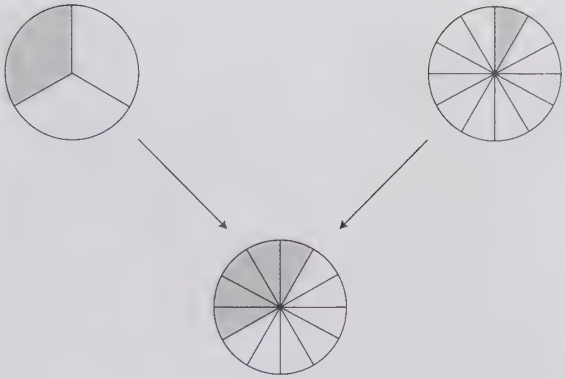
EXERCISE 3

1. Write the missing numbers.

(a) $\frac{1}{3} + \frac{1}{12}$

$= \frac{4}{12} + \frac{1}{12}$

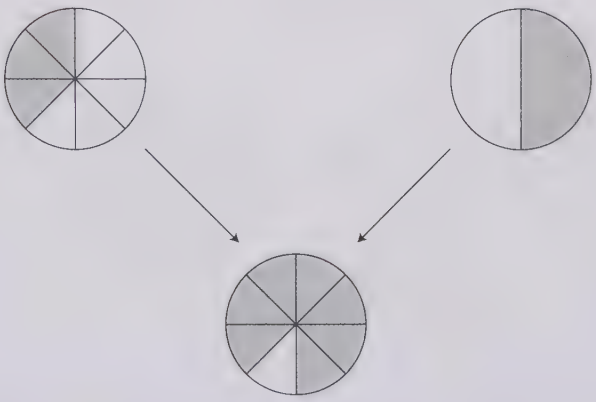
$= \frac{\square}{\square}$



(b) $\frac{3}{8} + \frac{1}{2}$

$= \frac{3}{8} + \frac{\square}{\square}$

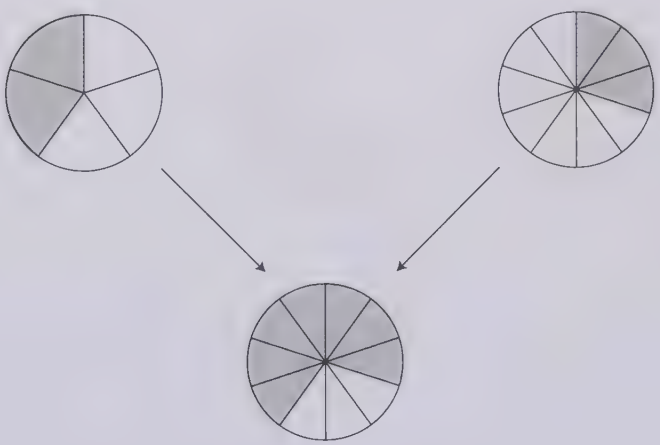
$= \frac{\square}{\square}$



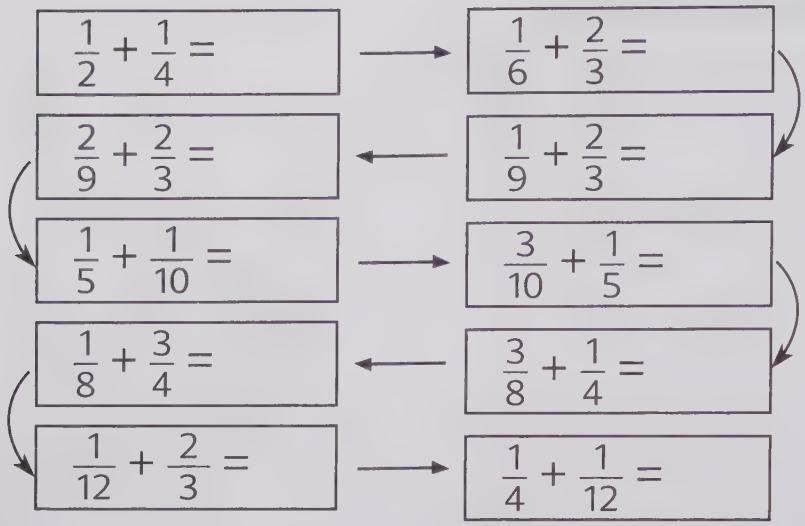
(c) $\frac{2}{5} + \frac{3}{10}$

$= \frac{\square}{\square} + \frac{3}{10}$

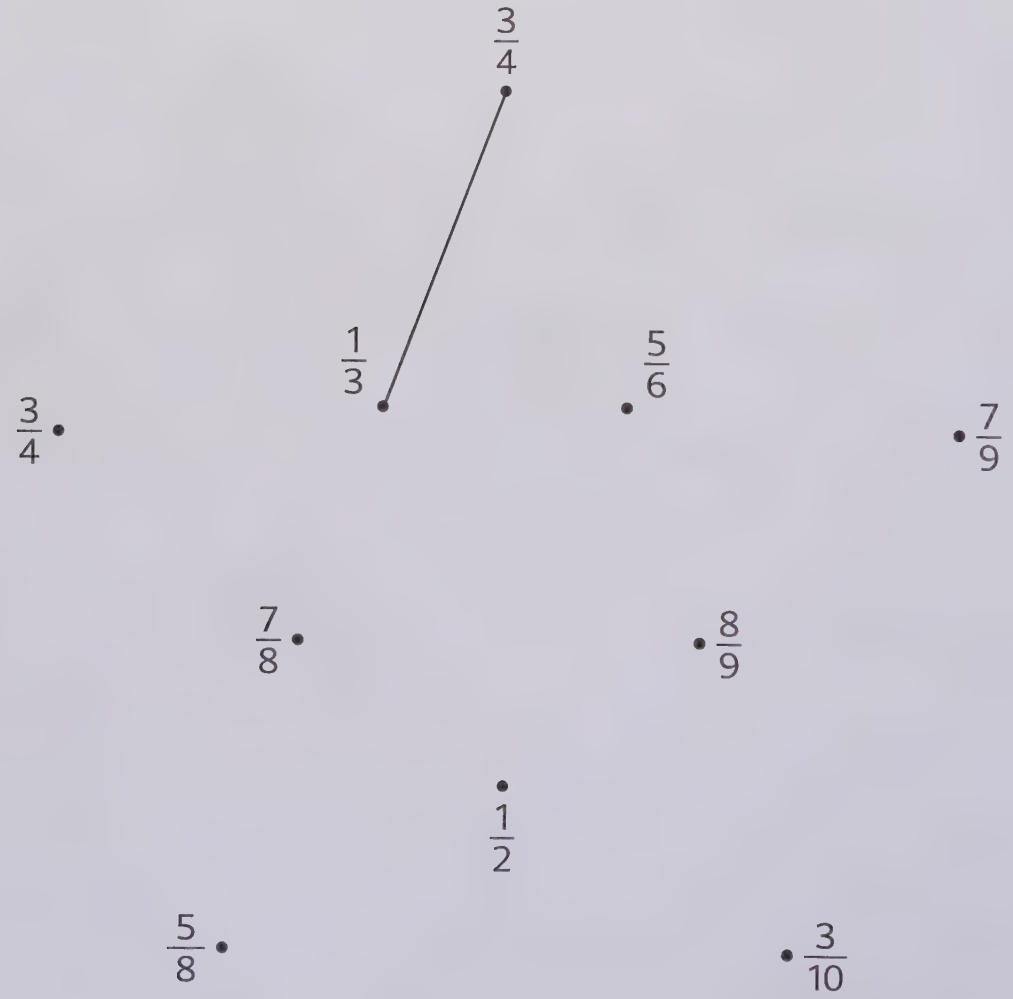
$= \frac{\square}{\square}$



2. Add. Write the answers in the simplest form.


$\frac{1}{2} + \frac{1}{4} =$
$\frac{1}{6} + \frac{2}{3} =$
$\frac{2}{9} + \frac{2}{3} =$
$\frac{1}{9} + \frac{2}{3} =$
$\frac{1}{5} + \frac{1}{10} =$
$\frac{3}{10} + \frac{1}{5} =$
$\frac{1}{8} + \frac{3}{4} =$
$\frac{3}{8} + \frac{1}{4} =$
$\frac{1}{12} + \frac{2}{3} =$
$\frac{1}{4} + \frac{1}{12} =$

Join the dots by following the order of the answers above. You will get a star.



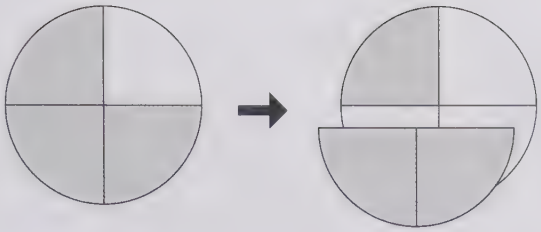
EXERCISE 4

1. Write the missing numbers.

(a) $\frac{3}{4} - \frac{1}{2}$

$= \frac{3}{4} - \frac{2}{4}$

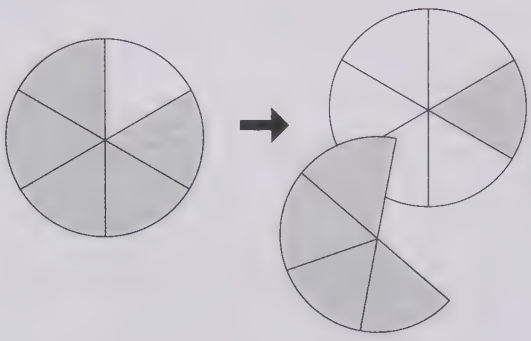
$= \frac{\square}{\square}$



(b) $\frac{5}{6} - \frac{2}{3}$

$= \frac{5}{6} - \frac{\square}{\square}$

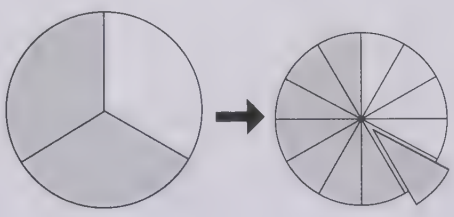
$= \frac{\square}{\square}$



(c) $\frac{2}{3} - \frac{1}{12}$

$= \frac{\square}{\square} - \frac{1}{12}$

$= \frac{\square}{\square}$



2. Subtract. Write the answers in the simplest form.

$\frac{1}{2} - \frac{1}{6}$ = A	$\frac{3}{4} - \frac{5}{8}$ = D	$\frac{2}{3} - \frac{2}{9}$ = E
$\frac{3}{4} - \frac{1}{12}$ = I	$\frac{2}{5} - \frac{1}{10}$ = L	$\frac{5}{6} - \frac{5}{12}$ = Q
$\frac{4}{5} - \frac{3}{10}$ = R	$\frac{1}{2} - \frac{5}{12}$ = T	$\frac{7}{12} - \frac{1}{3}$ = U

A 3-sided figure is called a triangle. What is a 4-sided figure called? Write the letters which match the answers to find out.

$\frac{5}{12}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{8}$	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{3}{10}$	$\frac{1}{3}$	$\frac{1}{12}$	$\frac{4}{9}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{3}{10}$

EXERCISE 5

1. Meredith bought a piece of cloth. She used $\frac{3}{8}$ of it to make a dress. What fraction of the cloth did she have left?

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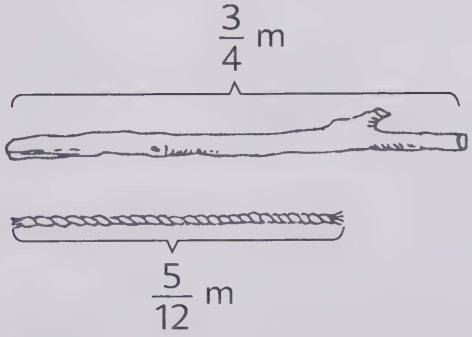
2. How much longer is the stick than the string?



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3. John spent $\frac{1}{2}$ of his money on a toy car. He spent $\frac{1}{6}$ of his money on a pen. What fraction of his money did he spend altogether?

4. Mary drank $\frac{3}{10}$ liter of orange juice. Jim drank $\frac{1}{5}$ liter of orange juice less than Mary. How much orange juice did they drink altogether?

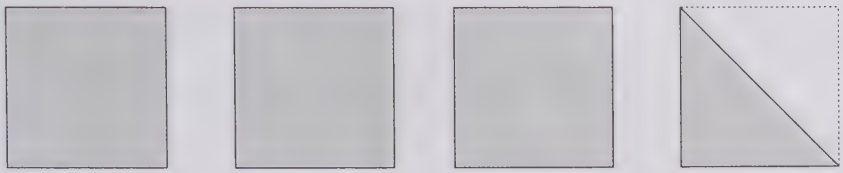
---

5. Lily bought 1 yd of ribbon. She used $\frac{1}{2}$ yd to tie a package and $\frac{3}{10}$ yd to make a bow. How much ribbon did she have left?

EXERCISE 6

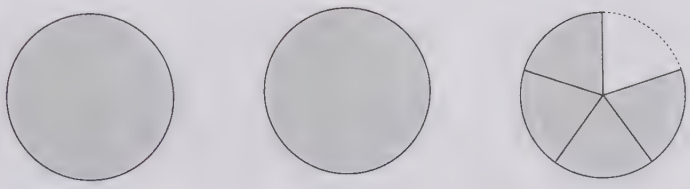
1. Write a mixed number for each of the following:

(a)



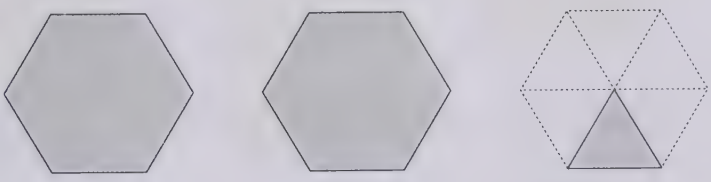
3 wholes 1 half =

(b)



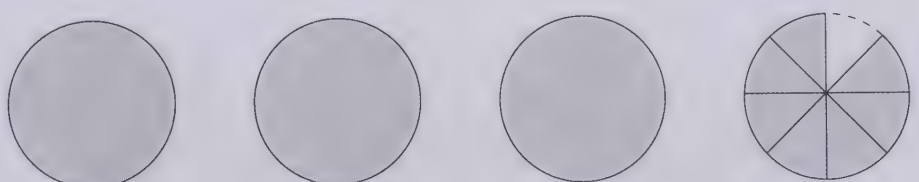
2 wholes 4 fifths =

(c)



2 wholes 1 sixth =

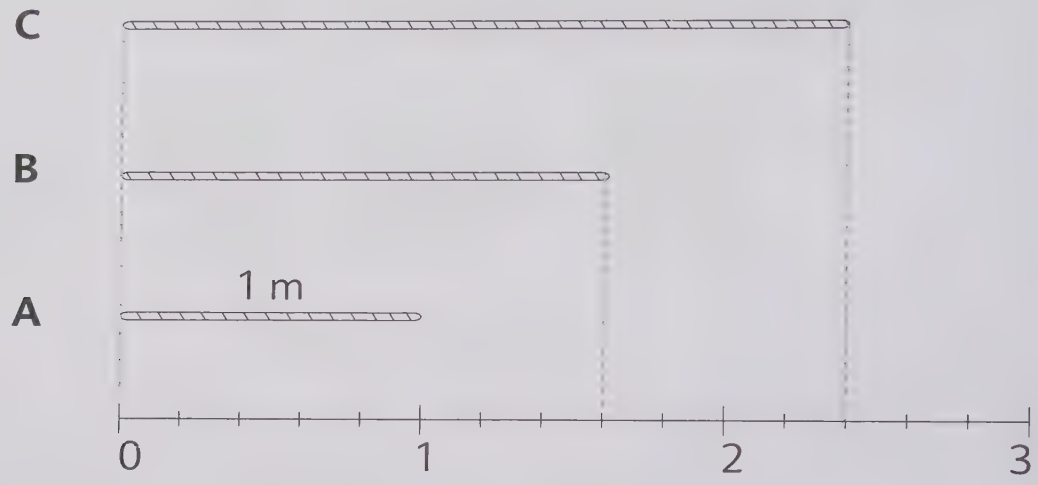
(d)



3 wholes 7 eighths =

2. Fill in the blanks.

(a) Here are three strings A, B and C.

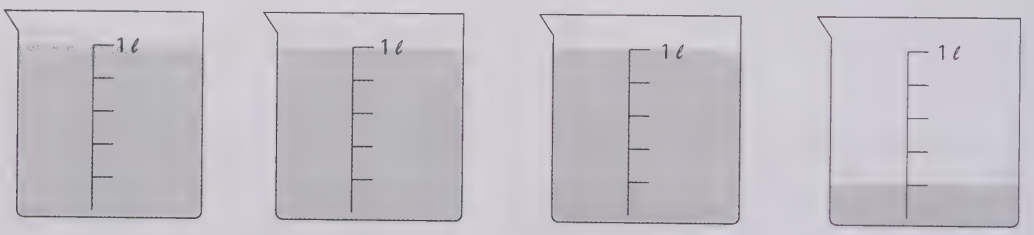


The length of A is 1 m.

The length of B is _____ m.

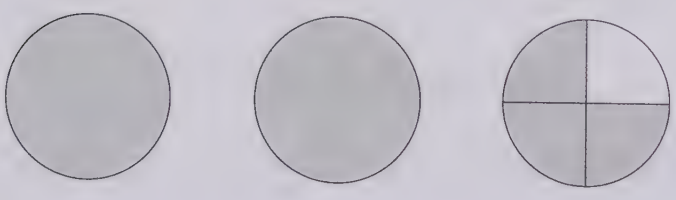
The length of C is _____ m.

(b)



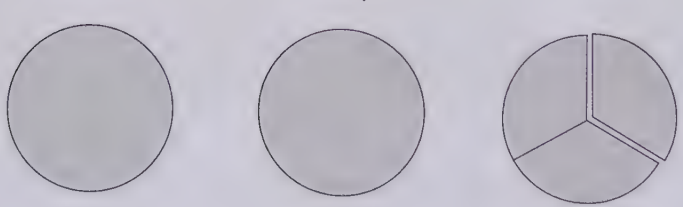
The total amount of water is _____ liters.

(c)



$2 + \frac{3}{4} =$

(d)



$3 - \frac{1}{3} =$

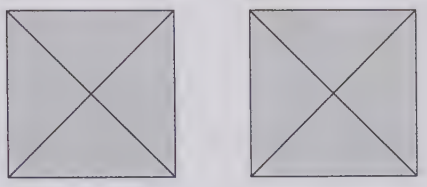
EXERCISE 7

1. Write an improper fraction for each of the following.

(a)

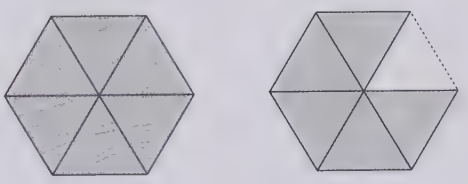
6 thirds =

(b)



8 quarters =

(c)

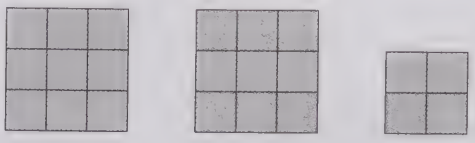
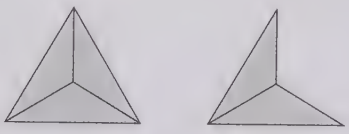
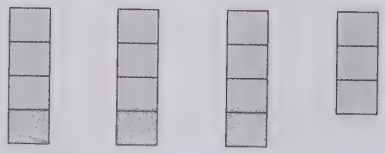


11 sixths =

(d)

13 fifths =

2. Write a mixed number and an improper fraction for each of the following.

		Mixed number	Improper fraction
(a)	1 whole	$2\frac{5}{6}$	$\frac{17}{6}$
(b)	 1 whole		
(c)	 1 whole		
(d)	 1 whole		
(e)	1 whole		
(f)	1 whole		

EXERCISE 8

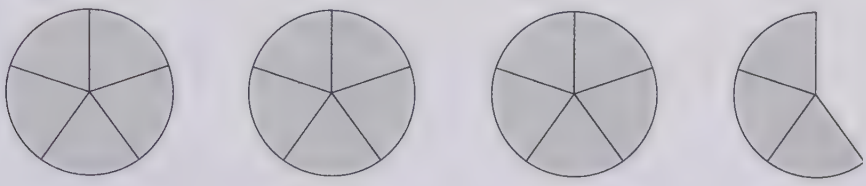
1. (a) Express $\frac{11}{4}$ as a mixed number.

$$\frac{11}{4} = \frac{8}{4} + \frac{3}{4}$$

$$= 2 + \frac{3}{4}$$

$$=$$

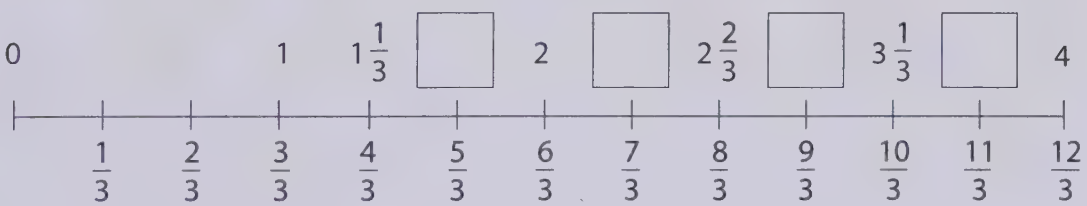
(b) Express $\frac{18}{5}$ as a mixed number.



$$\frac{18}{5} = \frac{15}{5} + \frac{3}{5}$$

$$=$$

2. Fill in each box with a mixed number or a whole number.

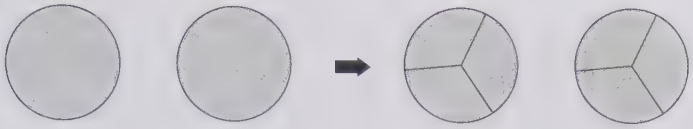


3. Change each improper fraction to a mixed number or a whole number.

(a) $\frac{5}{2} = \frac{4}{2} + \frac{1}{2}$ $=$	(b) $\frac{17}{10} = \frac{10}{10} + \frac{7}{10}$ $=$
(c) $\frac{7}{6} =$	(d) $\frac{7}{3} =$
(e) $\frac{11}{5} =$	(f) $\frac{9}{4} =$
(g) $\frac{11}{8} =$	(h) $\frac{9}{2} =$
(i) $\frac{15}{5} =$	(j) $\frac{12}{3} =$

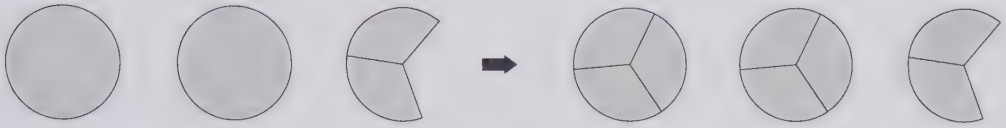
EXERCISE 9

1. (a) Express 2 as an improper fraction.



$$2 = \frac{\quad}{3}$$

(b) Express $2\frac{2}{3}$ as an improper fraction.

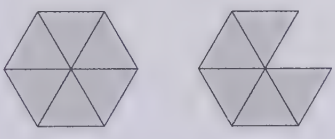
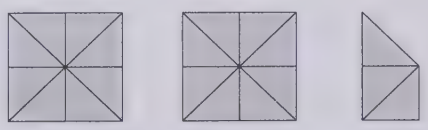


$$2\frac{2}{3} = 2 + \frac{2}{3}$$

$$= \frac{\quad}{3} + \frac{2}{3}$$

$$= \frac{\quad}{3}$$

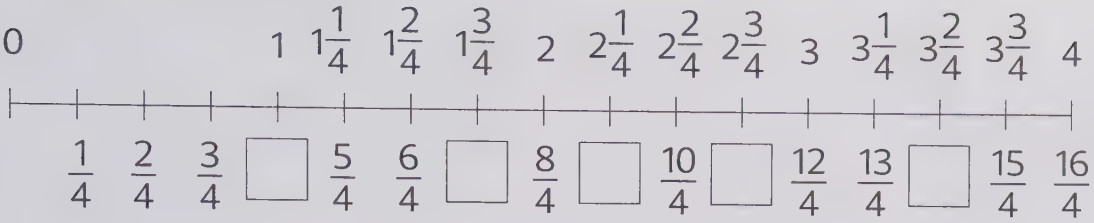
2. Express each of the following as an improper fraction.

(a)	(b)
	
$1\frac{5}{6} = 1 + \frac{5}{6}$	$2\frac{3}{8} = 2 + \frac{3}{8}$
$=$	$=$

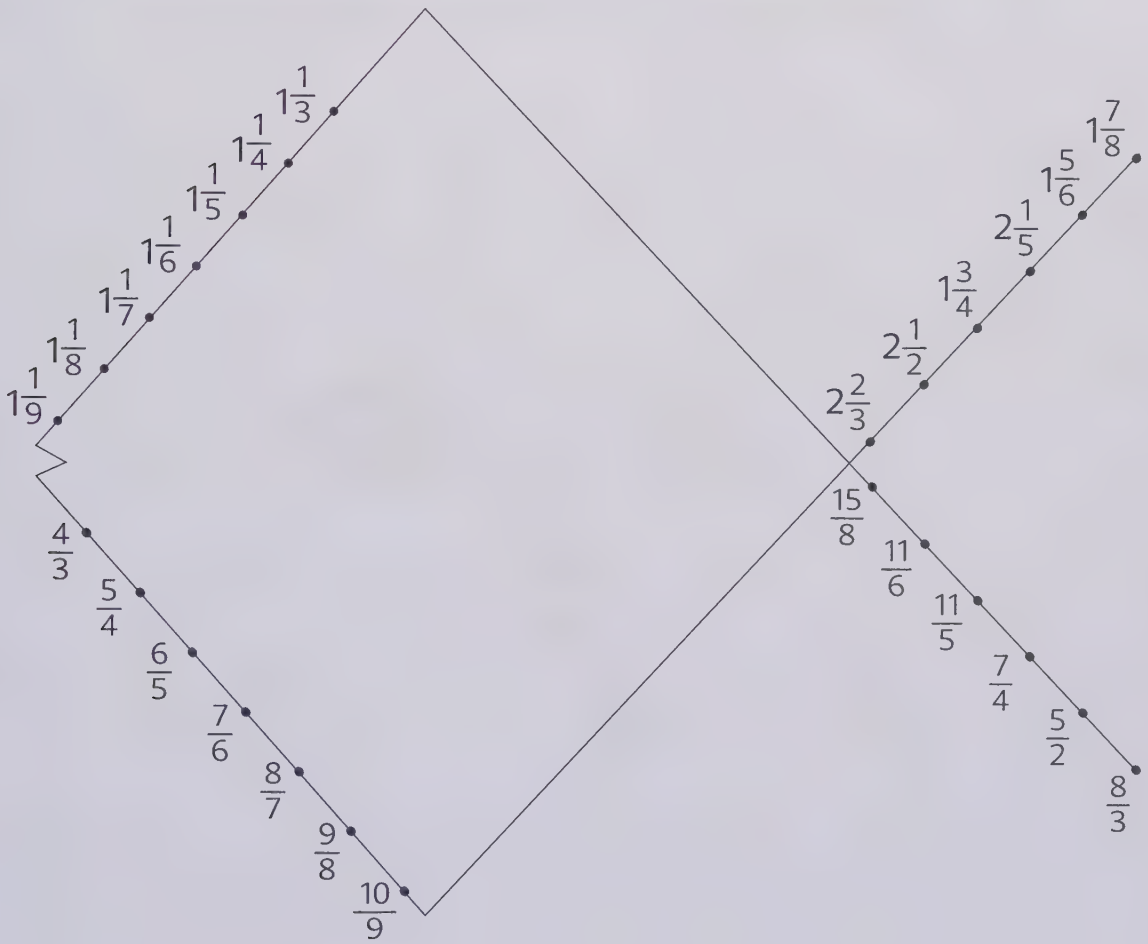
3. Change each mixed number to an improper fraction.

(a) $1\frac{2}{5} = 1 + \frac{2}{5}$ $= \frac{5}{5} + \frac{2}{5}$ $=$	(b) $1\frac{1}{4} = 1 + \frac{1}{4}$ $=$
(c) $2\frac{3}{8} =$	(d) $2\frac{1}{10} =$
(e) $3\frac{1}{6} =$	(f) $3\frac{1}{3} =$
(g) $2\frac{1}{2} =$	(h) $4\frac{3}{5} =$
(i) $1\frac{4}{9} =$	(j) $2\frac{5}{12} =$

4. Fill in each box with an improper fraction.



5. Draw a straight line to match each mixed number with its improper fraction.



EXERCISE 10

1. Express each of the following as a whole number or a mixed number in its simplest form.

   (a) $\frac{12}{4}$ (b) $\frac{25}{10}$

   (c) $\frac{15}{5}$ (d) $\frac{32}{12}$

   (e) $\frac{19}{3}$ (f) $\frac{20}{6}$

2. Draw a straight line to join each pair of equal numbers. If you do it correctly, you will trap all the animals.

$3\frac{1}{2}$ • $2\frac{2}{5}$ • • $2\frac{1}{3}$ • $3\frac{1}{4}$ • $4\frac{1}{6}$

$3\frac{7}{4}$ •

$1\frac{7}{5}$ • • $1\frac{4}{3}$

$2\frac{5}{4}$ • • $2\frac{3}{2}$

$3\frac{7}{6}$ • • $4\frac{3}{4}$

3. Add. Give each answer in its simplest form.

(a) $\frac{3}{5} + \frac{2}{5} =$	(b) $\frac{1}{3} + \frac{2}{3} =$
(c) $\frac{3}{4} + \frac{3}{4} =$	(d) $\frac{4}{7} + \frac{5}{7} =$
(e) $\frac{1}{2} + \frac{5}{6} =$	(f) $\frac{3}{4} + \frac{3}{8} =$
(g) $\frac{2}{3} + \frac{3}{6} =$	(h) $\frac{4}{5} + \frac{3}{10} =$

4. Subtract. Give each answer in its simplest form.

(a) $1 - \frac{7}{9} =$	(b) $1 - \frac{5}{12} =$
(c) $2 - \frac{3}{4} =$	(d) $2 - \frac{5}{8} =$
(e) $3 - \frac{4}{7} =$	(f) $1 - \frac{4}{5} =$

5. Write **>**, **<**, or **=** in each ◯ .

(a) $1\frac{1}{2}$ ◯ $\frac{7}{8}$

(b) $\frac{6}{7}$ ◯ 1

(c) $\frac{10}{11}$ ◯ $\frac{11}{3}$

(d) $\frac{10}{3}$ ◯ $3\frac{1}{3}$

(e) $1\frac{11}{12}$ ◯ $\frac{6}{3}$

(f) $1\frac{9}{10}$ ◯ $2\frac{2}{4}$

(g) $1\frac{2}{3}$ ◯ $\frac{5}{3}$

(h) $\frac{7}{2}$ ◯ $2\frac{9}{10}$

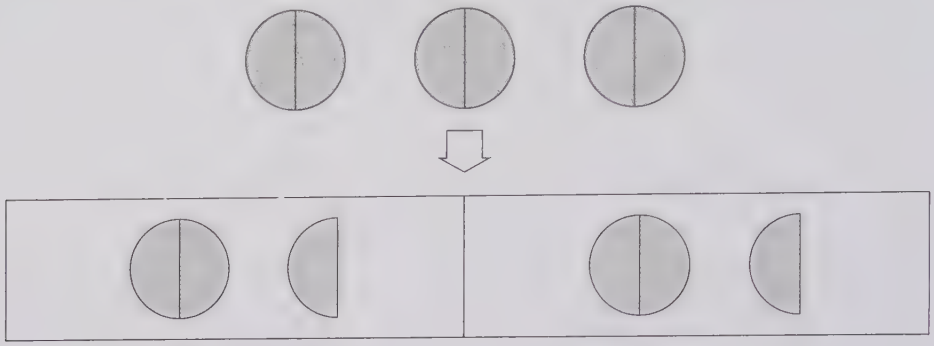
(i) $\frac{9}{4}$ ◯ $\frac{8}{9}$

(j) $\frac{12}{5}$ ◯ $2\frac{2}{5}$

EXERCISE 11

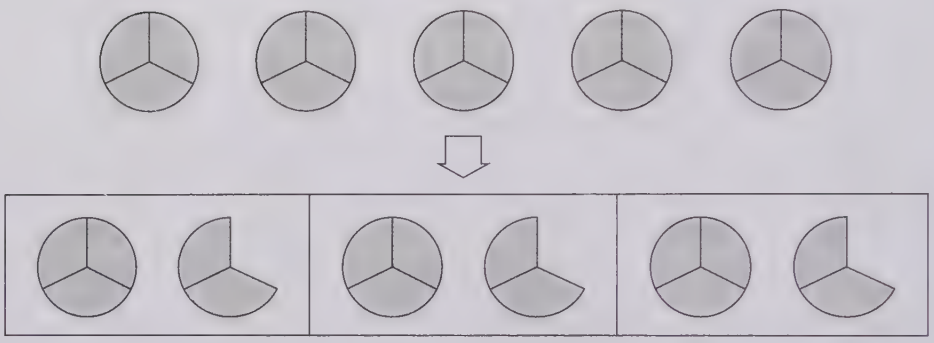
1. Write each of the following as an improper fraction.

(a)



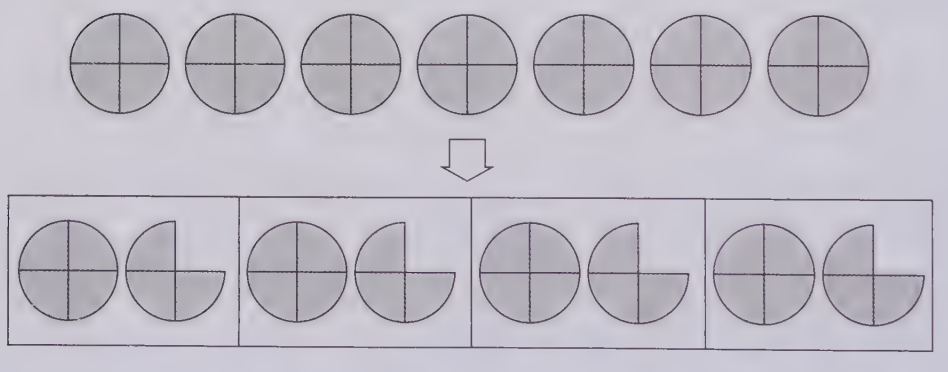
$3 \div 2 =$

(b)



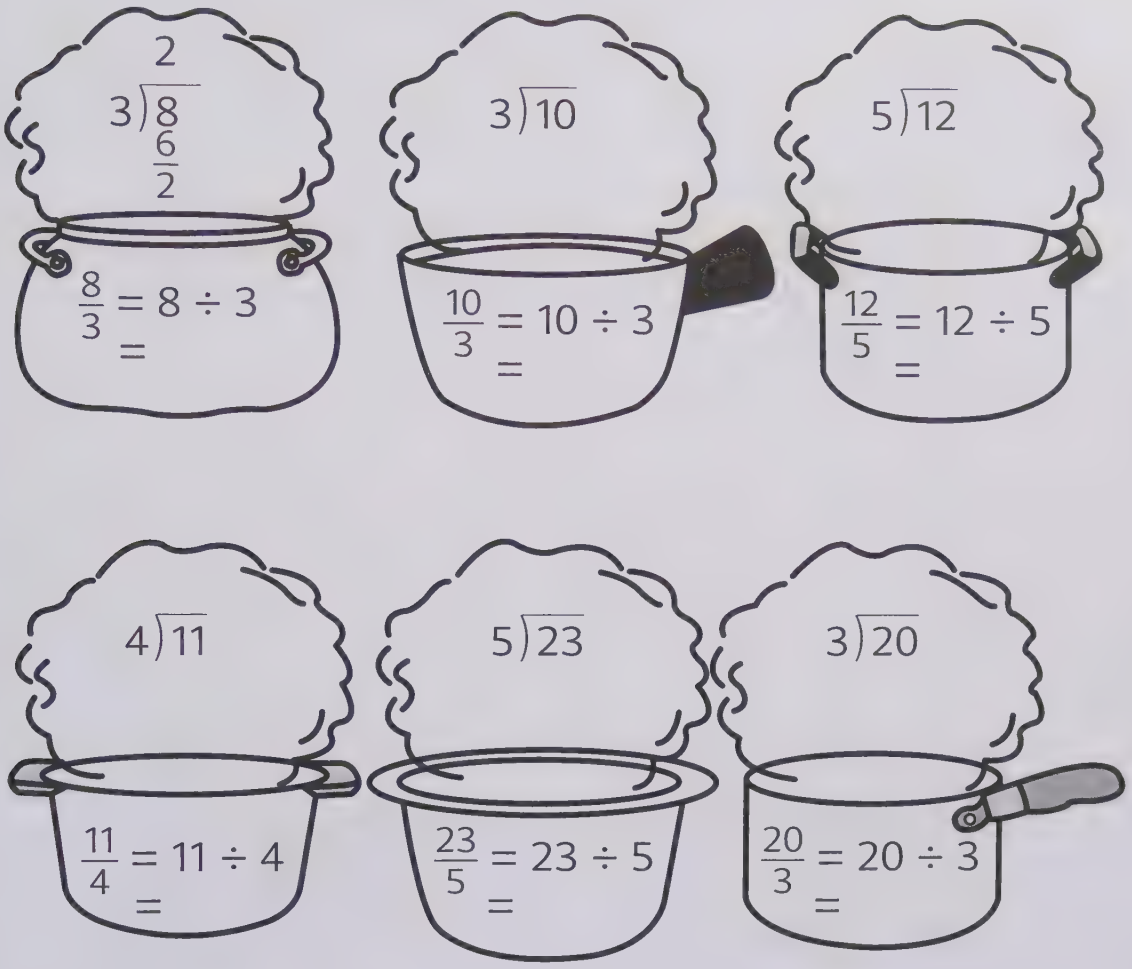
$5 \div 3 =$

(c)



$7 \div 4 =$

2. Change each improper fraction to a mixed number by division.

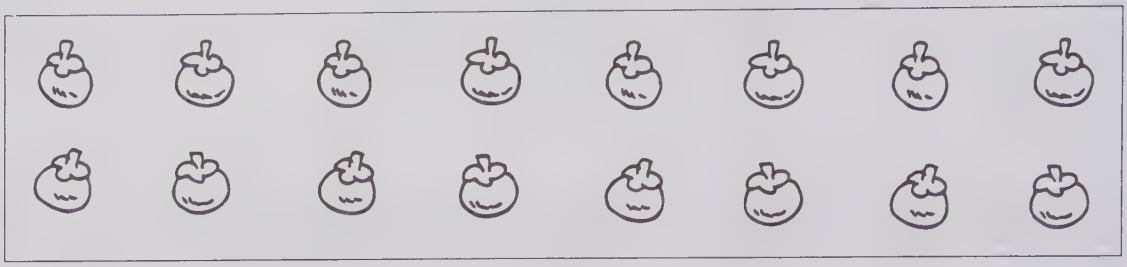


3. Change each improper fraction to a whole number or a mixed number.

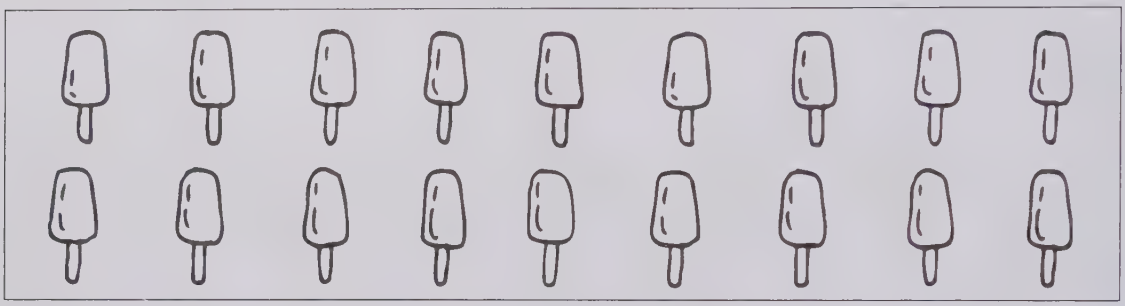
(a) $\frac{8}{2} = 8 \div 2$ $2\overline{)8}$ =	(b) $\frac{11}{5} = 11 \div 5$ $5\overline{)11}$ =
(c) $\frac{17}{8} =$	(d) $\frac{27}{3} =$

EXERCISE 12

1. (a) Divide the set into 2 equal parts.

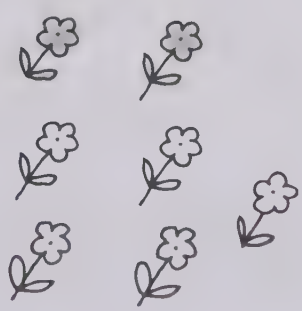


(b) Divide the set into 3 equal parts.

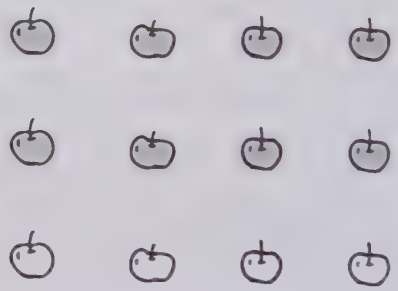


2. What fraction of each set is shaded?

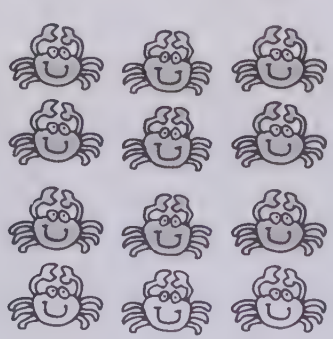
(a)



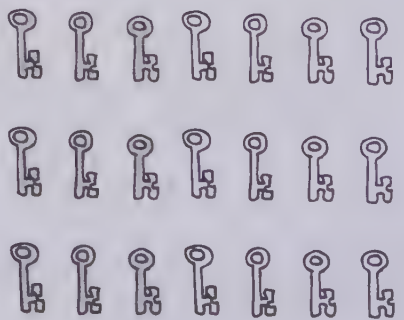
(b)



(c)



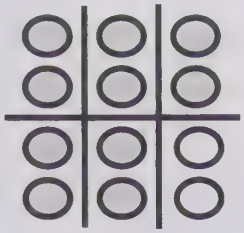
(d)



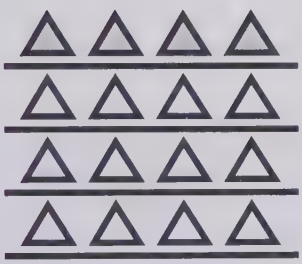
3. What fraction of each set is shaded?

(a)

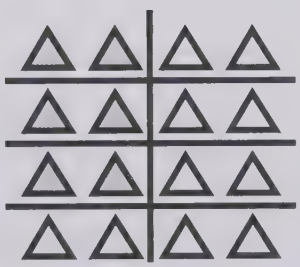
(b)



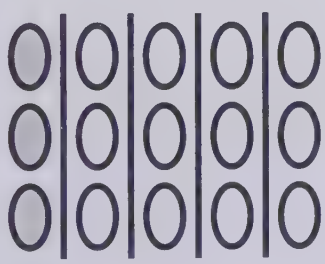
(c)



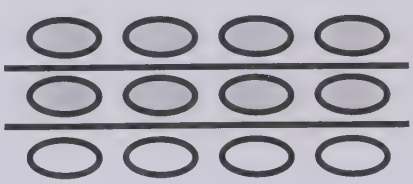
(d)



(e)

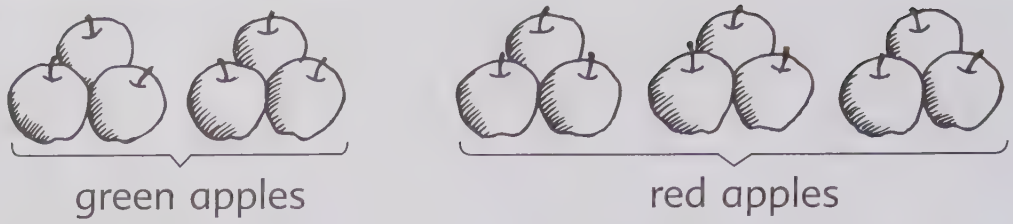


(f)



4. Write a fraction in each ☐.

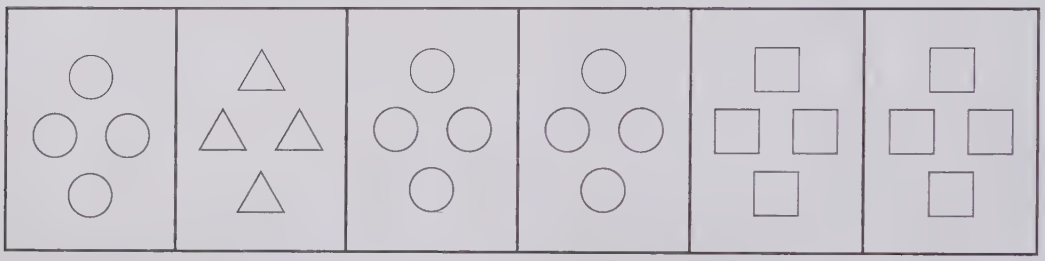
(a)



☐ of the apples are green apples.

☐ of the apples are red apples.

(b)

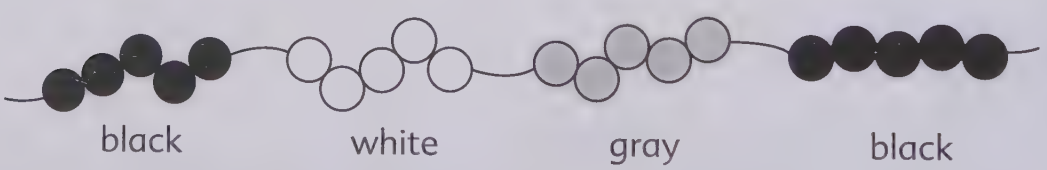


☐ of the shapes are circles.

☐ of the shapes are triangles.

☐ of the shapes are squares.

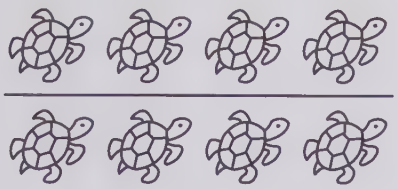
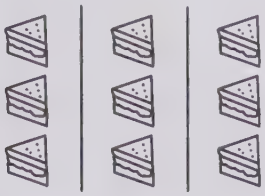
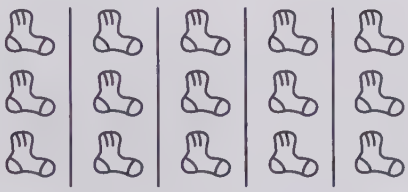
(c)



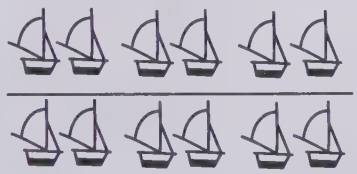
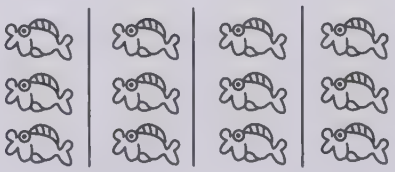
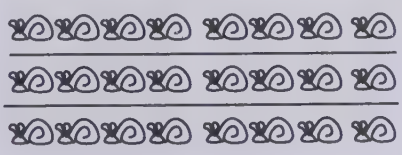
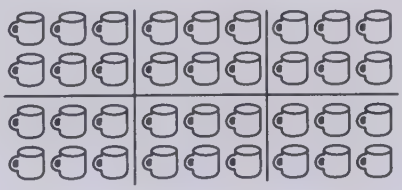
☐ of the beads are black beads.

EXERCISE 13

1. Color.

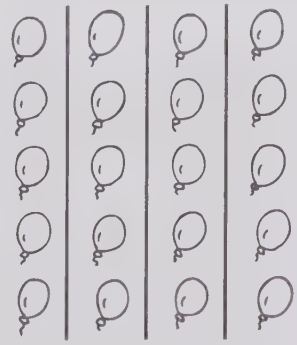
(a) $\frac{1}{2}$ of the set 	(b) $\frac{1}{3}$ of the set 
(c) $\frac{2}{5}$ of the set 	(d) $\frac{5}{9}$ of the set

2. Find the value of each of the following.

(a)  $\frac{1}{2}$ of 12 =	(b)  $\frac{1}{4}$ of 12 =
(c)  $\frac{1}{3}$ of 24 =	(d)  $\frac{1}{6}$ of 36 =

3. Find the value of each of the following.

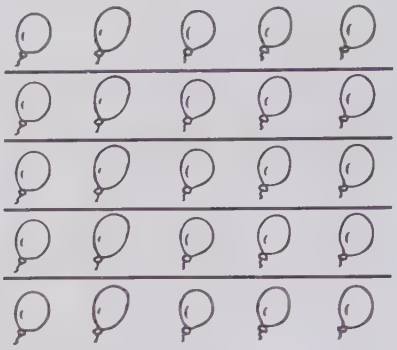
(a)



$\frac{1}{4}$ of 20 =

$\frac{3}{4}$ of 20 =

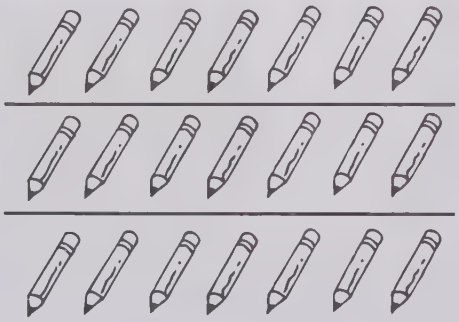
(b)



$\frac{1}{5}$ of 25 =

$\frac{3}{5}$ of 25 =

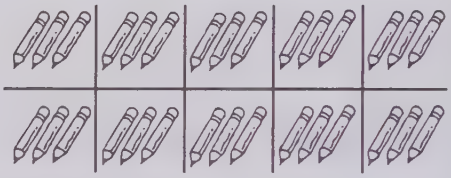
(c)



$\frac{1}{3}$ of 21 =

$\frac{2}{3}$ of 21 =

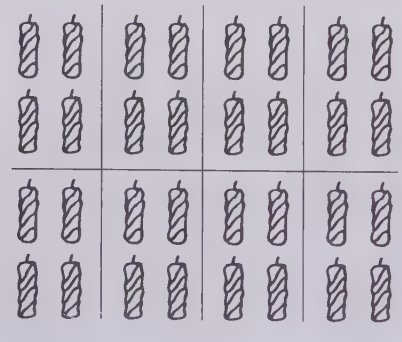
(d)



$\frac{1}{10}$ of 30 =

$\frac{7}{10}$ of 30 =

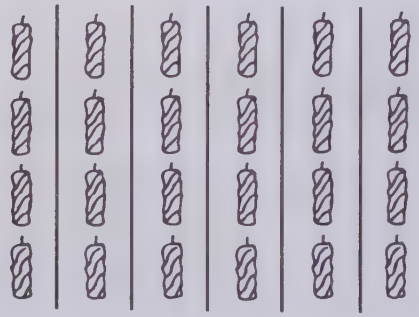
(e)



$\frac{1}{8}$ of 16 =

$\frac{3}{8}$ of 16 =

(f)



$\frac{1}{6}$ of 24 =

$\frac{5}{6}$ of 24 =

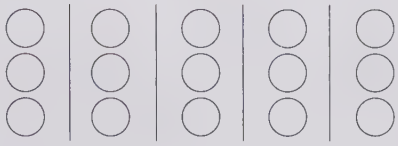
EXERCISE 14

Find the value of each of the following.

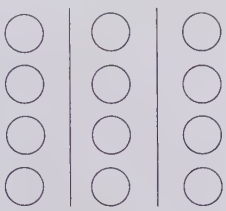
1. (a)

$\frac{1}{4}$ of $8 = \frac{8}{4}$

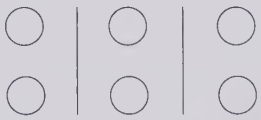
$=$

(b) 

$\frac{1}{5}$ of $15 =$

(c) 

$\frac{1}{3}$ of $12 =$

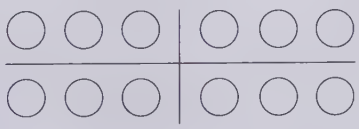
(d) 

$\frac{1}{3}$ of $6 = \frac{6}{3}$

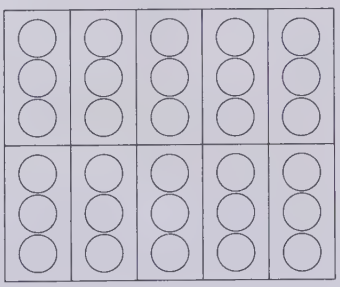
$=$

$\frac{2}{3}$ of $6 = 2 \times \frac{6}{3}$

$=$

(e) 

$\frac{3}{4}$ of $12 =$

(f) 

$\frac{3}{10}$ of $30 =$

2.

(a) $\frac{1}{2}$ of $8 = \frac{8}{2}$ $=$	(b) $\frac{1}{3}$ of $15 =$
(c) $\frac{1}{4}$ of $20 =$	(d) $\frac{1}{6}$ of $18 =$
(e) $\frac{1}{5}$ of $80 =$	(f) $\frac{1}{6}$ of $96 =$
(g) $\frac{1}{8}$ of $120 =$	(h) $\frac{1}{10}$ of $150 =$

3.

(a) $\frac{2}{3}$ of $15 = 2 \times \frac{15}{3}$ $=$	(b) $\frac{3}{4}$ of $20 =$
(c) $\frac{4}{5}$ of $30 =$	(d) $\frac{5}{6}$ of $36 =$
(e) $\frac{2}{3}$ of $48 =$	(f) $\frac{3}{4}$ of $60 =$
(g) $\frac{3}{5}$ of $100 =$	(h) $\frac{7}{10}$ of $120 =$

EXERCISE 15

Give each answer in its simplest form.

1. (a) Express 20¢ as a fraction of $1.

$\frac{20}{100} =$

(b) Express 80 cm as a fraction of 1 m.

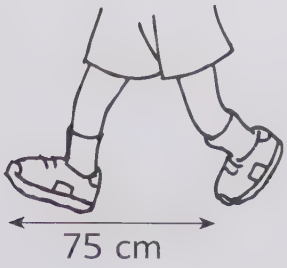
(c) Express 25 minutes as a fraction of 1 hour.

2. (a) What fraction of 1 day is 8 hours?

(b) What fraction of a 90-page book is 50 pages?

(c) What fraction of 1 m is 45 cm?

3. Adam's stride is 75 cm. Express 75 cm as a fraction of 1 m.



4. In a class of 40 children, 16 of them wear glasses. What fraction of the children wear glasses?

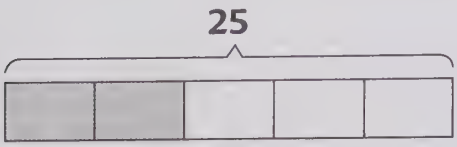
5. Cameron has 40 toy cars. 15 of them are battery operated. What fraction of the toy cars are battery operated?

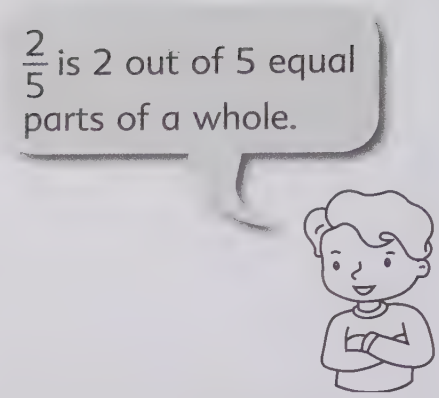
6. Jim bought a packet of 60 stamps. 24 of them were Canadian stamps. What fraction of the stamps were Canadian stamps?

EXERCISE 16

1. Manfred had 25 picture cards.

   He gave $\frac{2}{5}$ of them to his friends.



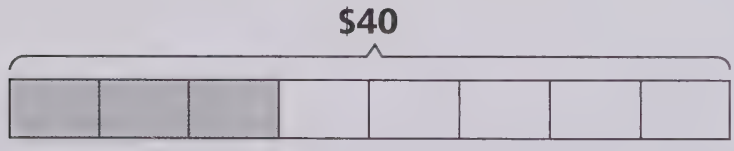


   (a) How many cards did Manfred give to his friends?

   (b) How many cards did he have left?

2. Sharon had $40.

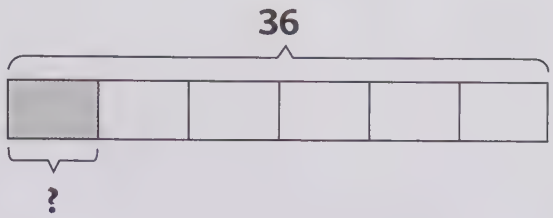
   She spent $\frac{3}{8}$ of the money on a storybook.



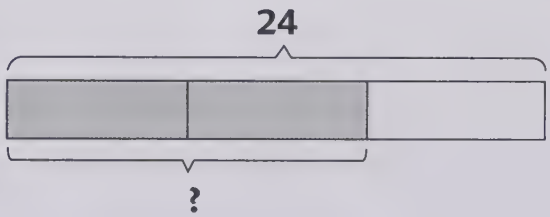
   (a) How much did the storybook cost?

   (b) How much money did Sharon have left?

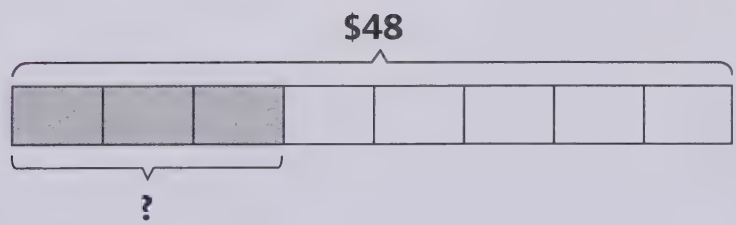
3. There are 36 children in a class. $\frac{1}{6}$ of them wear glasses. How many children in the class wear glasses?



4. There are 24 potatoes in a bag. Lily peeled $\frac{2}{3}$ of them. How many potatoes did she peel?



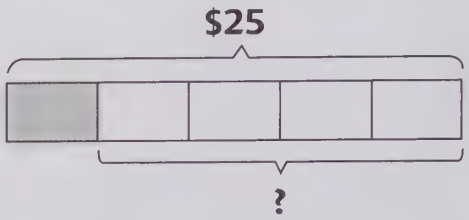
5. Lindsay had $48. She spent $\frac{3}{8}$ of the money. How much money did she spend?



EXERCISE 17

1. Mandy had \$25. She spent $\frac{1}{5}$ of it and saved the rest.

   How much did she save?



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2. Matthew bought 45 oranges. He used $\frac{3}{5}$ of them to make orange juice. How many oranges did he have left?

3. Nellie had \$48. She spent $\frac{1}{4}$ of it on a calculator. She also bought a book for \$14. How much money did she spend altogether?

---

4. There are 60 people on a bus. $\frac{2}{5}$ of them are children. If there are 15 boys, how many girls are there?

5. There were 96 people on board a ship. $\frac{1}{4}$ of them were females. How many males were there?

6. There are 144 children in a field. $\frac{3}{8}$ of them are running. How many children are not running?

EXERCISE 18

1. Lynn spent $\frac{7}{10}$ of her money and saved the rest.

   She spent $42.

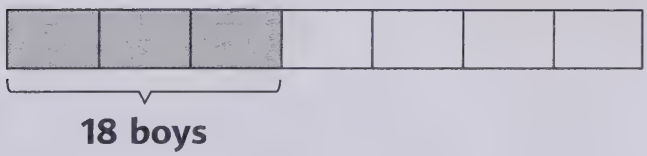
(a) How much money did Lynn have at first?

7 units = $42
1 unit = ?
10 units = ?

(b) How much money did she save?

3 units = ?

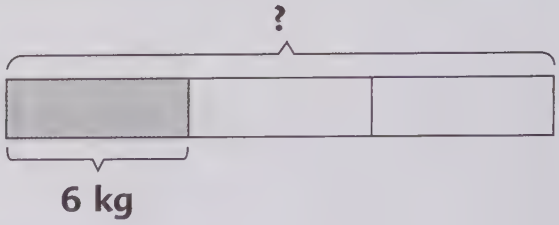
2. A group of children went for a picnic. $\frac{3}{7}$ of them were boys. There were 18 boys.



(a) How many children were there?

(b) How many girls were there?

3. Mrs. Reed bought a packet of flour. She used $\frac{1}{3}$ of the flour to bake bread. If she used 6 kg of flour, how many kilograms of flour did she buy?



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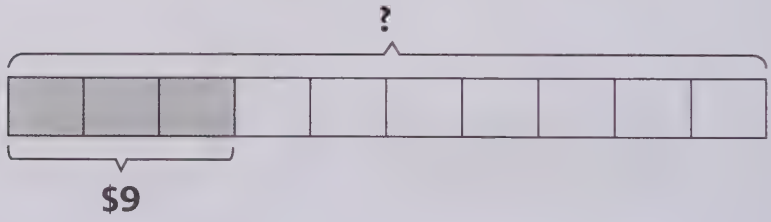
4. Susan spent $\frac{3}{10}$ of her money on a bag. If the bag cost $9, how much money did she have at first?



EXERCISE 19

1. Stewart had $25. He spent $5. What fraction of his money did he have left?

---

2. There were 100 children at a carnival. 60 of the children were boys. Express the number of girls as a fraction of the total number of children at the carnival.

3. Sara bought 40 m of material. She made 6 curtains from the material. She used 2 m to make each curtain. What fraction of the material did she use for the 6 curtains?

---

4. Travis had 160 mangoes. He sold some at $2 each and made $240.

   (a) How many mangoes did he sell?

   (b) What fraction of his mangoes did he have left?

5. Mary bought a roll of ribbon. After using $\frac{5}{8}$ of the ribbon to decorate some packages, she had 15 ft of the ribbon left. How many feet of ribbon did she buy?

---

6. John bought some stamps. He used $\frac{3}{5}$ of them to mail letters. He had 12 stamps left. How many stamps did he use?

REVIEW 3

1. Write the following in words.

   (a) 60,500 _____

   (b) 42,819,000 _____

   (c) 104 _____

2. Write the following in figures.

   (a) seventy-five thousand, six hundred twelve _____

   (b) eighty thousand, two _____

3. What is the value of the digit **3** in 6**3**,029? _____

4. The digit **6** in **6**70,900 stands for 6 × ☐.

5. Arrange the numbers in increasing order.
   80,360, 80,036, 83,600, 83,060, 86,300

   _____

6. Round 6349 to the nearest hundred. _____

7. Write down the first five multiples of 6.

   _____

8. Which one of the following is a common factor of 16 and 24?
   3, 4, 6, 48

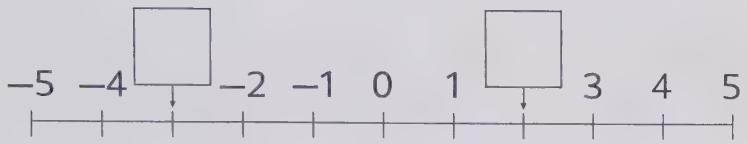
   _____

9. Subtract 238 from the product of 23 and 80. _____

10. Divide the sum of 352 and 698 by 5. _____

11. What is the quotient and remainder when 2490 is divided by 4? _____

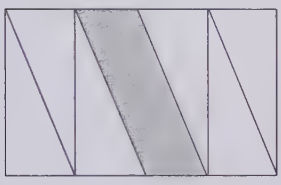
12. Write the number represented by each letter.



13. Arrange the numbers in increasing order.

$\frac{3}{4}$, $\frac{7}{6}$, $\frac{5}{12}$, 1 _____

14. What fraction of the figure is shaded?
Give your answer in its simplest form.



_____

15. What is $\frac{3}{4}$ of 80? _____

16. The number of people who visited an exhibition was 5350 when rounded to the nearest ten.
Which one of the following could be the exact number of people who visited the exhibition?

5340, 5344, 5345, 5355 _____

17. What fraction of 1 foot is 4 inches? _____

18. Express $1\frac{3}{4}$ as an improper fraction. _____

19. Express $\frac{24}{5}$ as a mixed number. _____

20. Which one of the following is the same as $\frac{4}{5}$? _____

$4 + 5$ $4 - 5$ 4×5 $4 \div 5$

21. Complete each equation to make it true.

(a) $(11 \times 4) \div (1 \times 22) = 4 \div$ _____

(b) $18 - (10 + 6) =$ _____ $- 52$

(c) $20 \times (18 \div 2) = 100 +$ _____

(d) $(7 + 5) \times (15 - 12) =$ _____ $\times 12$

(e) $(40 \div 8) + 3 = (4 \times 2) - (1 \times$ _____$)$

(f) $10 + (28 \div 7) = (8 \times 5) -$ _____

(g) $(72 \div 8) \div (3 + 6) = 3 \div$ _____

22. Mrs. Smith earns $1750 a month.
How much does she earn in 6 months? _____

23. Jessica made 1188 muffins. She packed 6 muffins in 1 bag.
How many bags of muffins did she have? _____

24. Nicole and Tasha have 2000 stickers altogether. If Nicole has 600 more stickers than Tasha, how many stickers does Nicole have?

---

25. Jared bought a table and 12 chairs for $2400. If each chair cost $165, find the cost of the table.

---

26. There are 60 roses. $\frac{7}{10}$ of them are red roses. The rest are yellow roses. How many yellow roses are there?

27. Mrs. Reed bought 30 eggs. She used 5 of them to bake a cake. What fraction of the eggs did she have left?

---

28. Mr. Shaw bought 12 sheets of brown paper. He used $\frac{2}{3}$ of them to line some cupboards. How many sheets of paper were left?

---

29. 2500 people took part in a cross-country race. The number of adults were 4 times the number of children. If there were 1200 men, how many women were there?

30. Lauren bought 1 lb of flour. She used $\frac{2}{5}$ lb of flour to bake a banana cake. She used another $\frac{3}{10}$ lb of flour to bake a chocolate cake.

(a) How much flour did she use altogether?

(b) How much more flour did she use to bake the banana cake than the chocolate cake?

---

31. 4 people shared the cost of a stereo set and a television set equally. The television set cost $1980. The stereo set cost $1200 more than the television set. How much did each person pay?

32. A greengrocer had 25 crates of grapefruits. There were 36 grapefruits in each crate. He threw away 28 rotten grapefruits and sold 786 of the rest. How many grapefruits did he have left?

33. Lindsey bought 12 packets of orange juice. Each packet contained 375 ml of orange juice. She filled two 2-liter jugs with the orange juice. Then she poured the remaining orange juice into a tall glass. How much orange juice was there in the glass?

EXERCISE 1

1. Mark all the angles in each figure. Then complete the sentence below it.

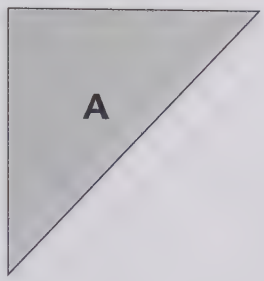


Figure A has _____ angles.

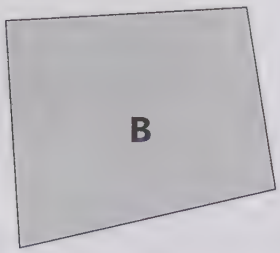


Figure B has _____ angles.

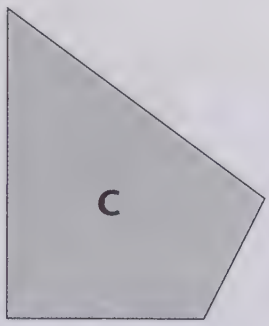


Figure C has _____ angles.

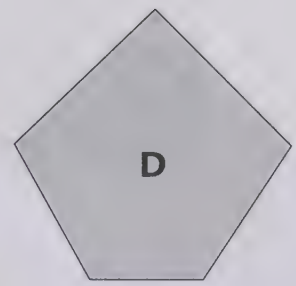


Figure D has _____ angles.

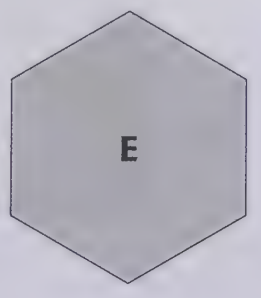


Figure E has _____ angles.

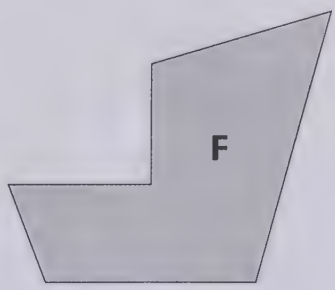
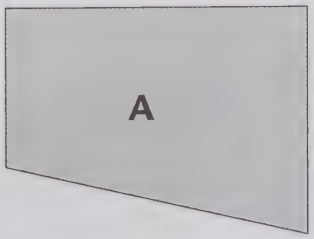
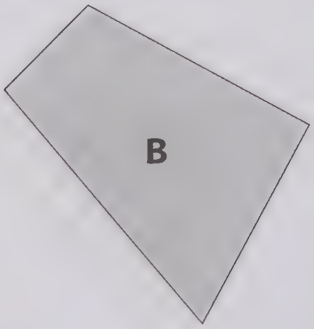


Figure F has _____ angles.

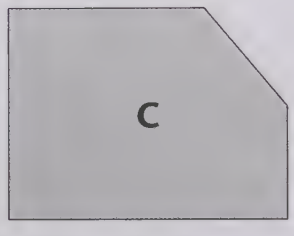
2. Mark all the right angles in each figure. Then complete the sentence below it.



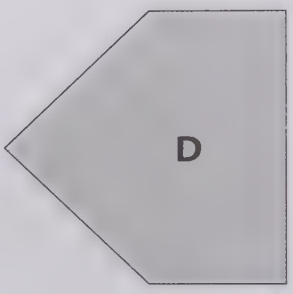
There are _____ right angles.



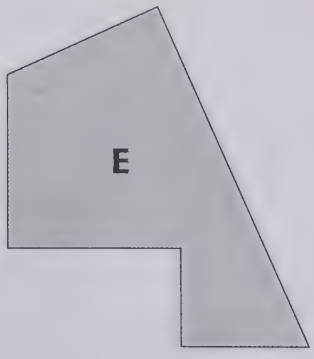
There is _____ right angle.



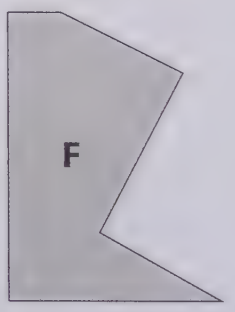
There are _____ right angles.



There are _____ right angles.

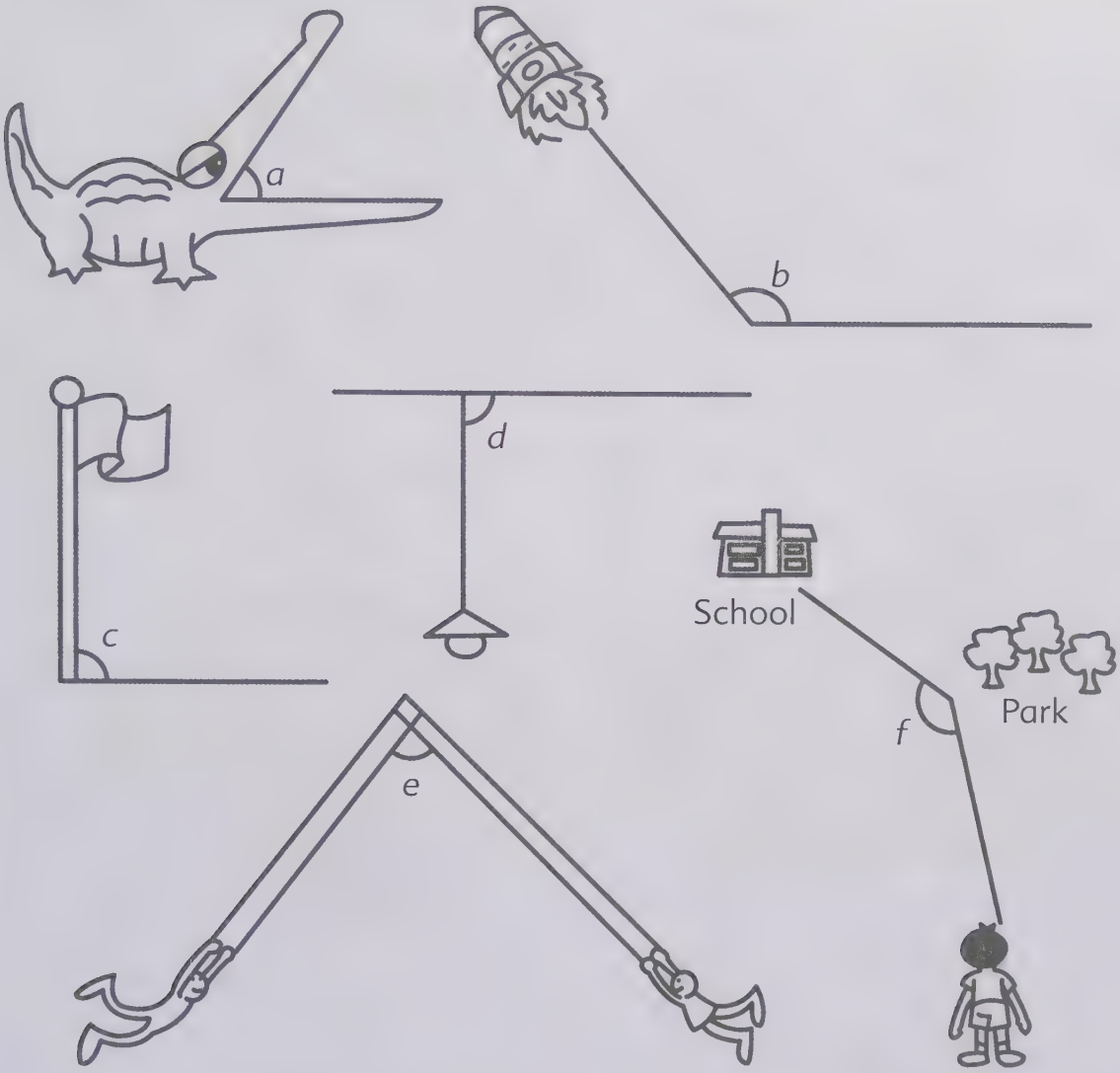


There are _____ right angles.



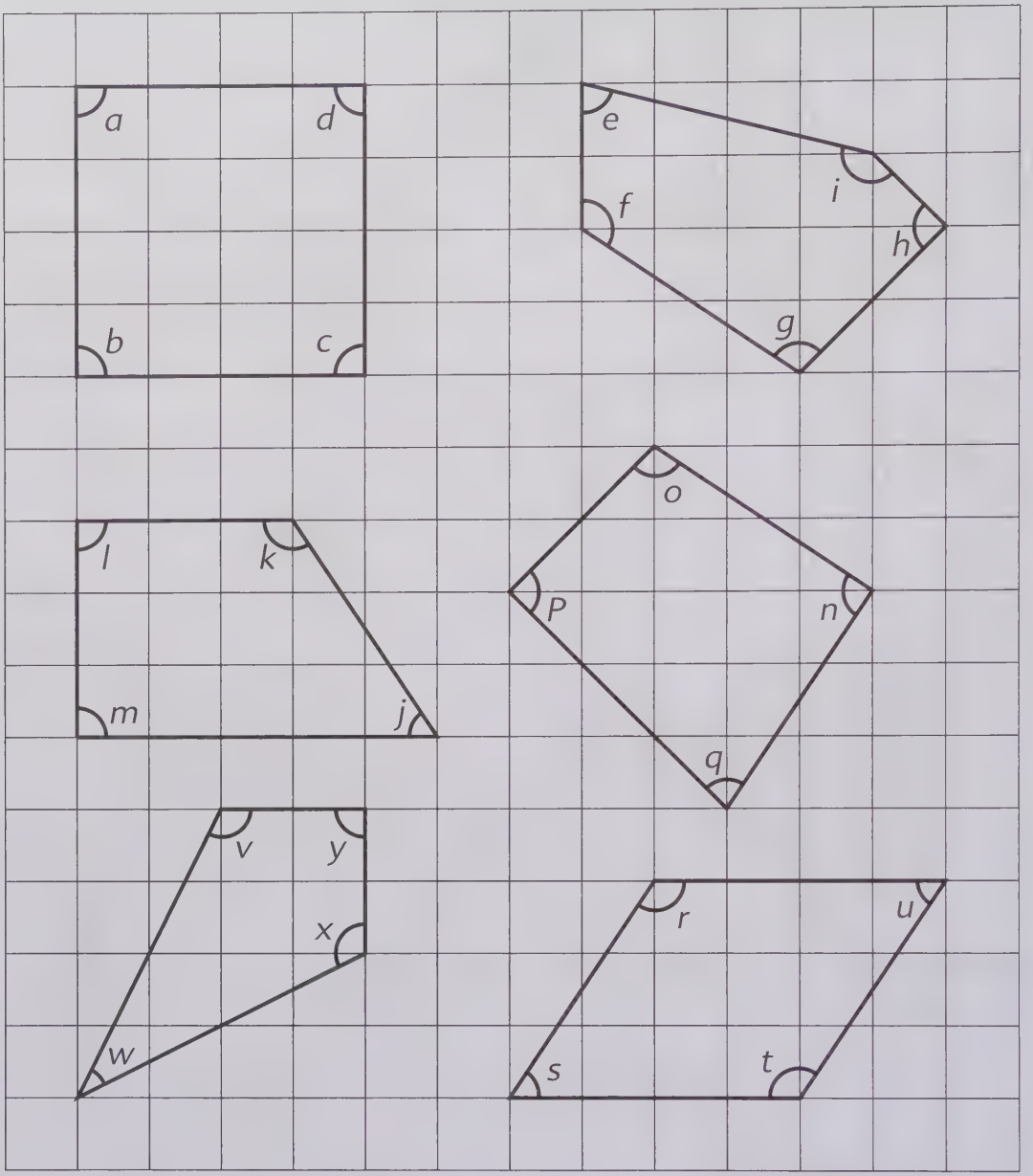
There are _____ right angles.

3. List all the marked angles in the table below.



Right angles	∠*c*,
Acute angles (smaller than a right angle)	
Obtuse angles (greater than a right angle)	

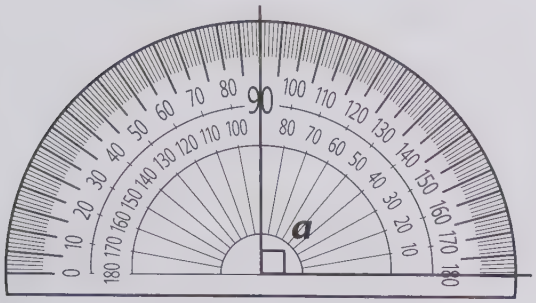
4. List all the marked angles in the table below.



Right angles	$\angle a$,
Acute angles	
Obtuse angles	

EXERCISE 2

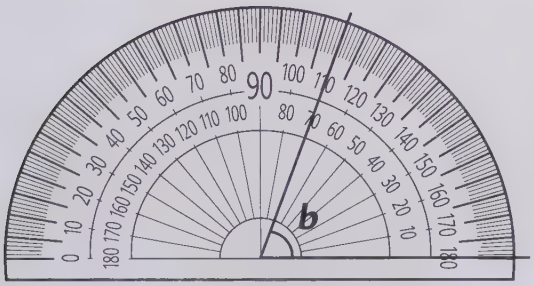
1. What is the size of each angle in degrees?



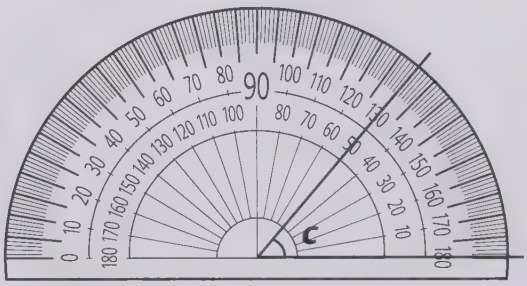
$\angle a$ is a right angle.

It is 90°.

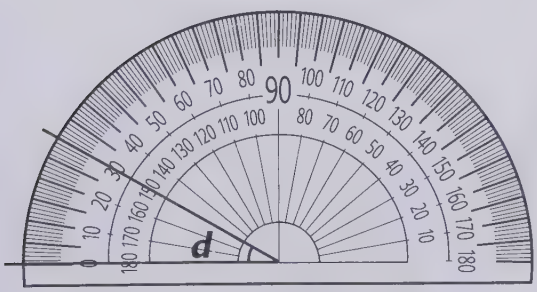
The following angles are smaller than 90°.



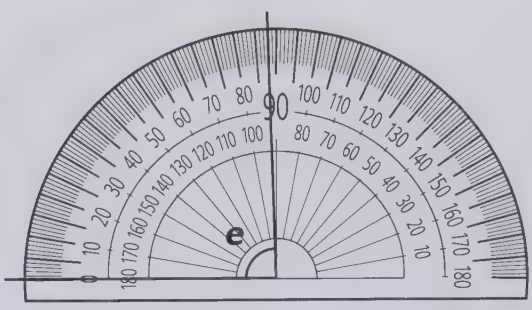
$\angle b =$ ☐



$\angle c =$ ☐

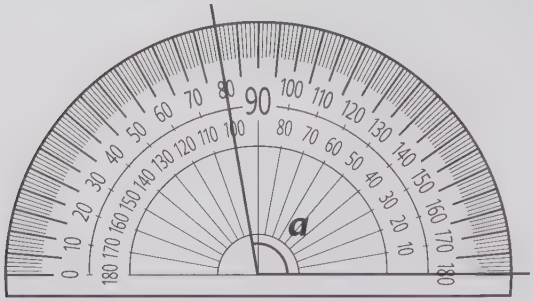


$\angle d =$ ☐



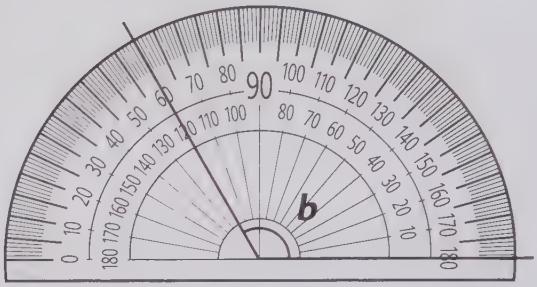
$\angle e =$ ☐

2. What is the size of each angle in degrees?

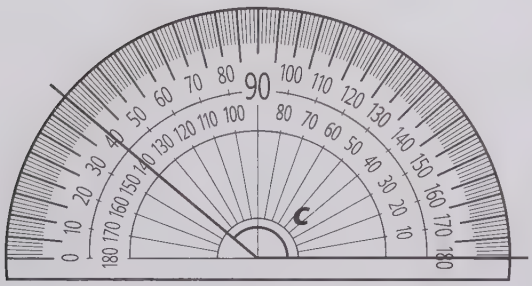


$\angle a =$ ☐

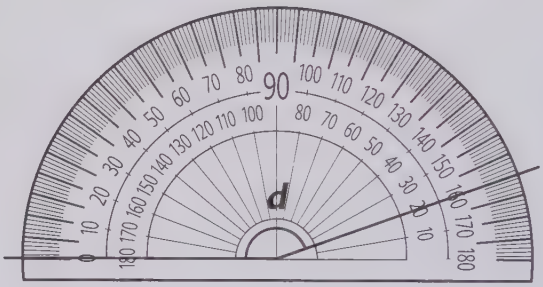
These angles are greater than 90°.



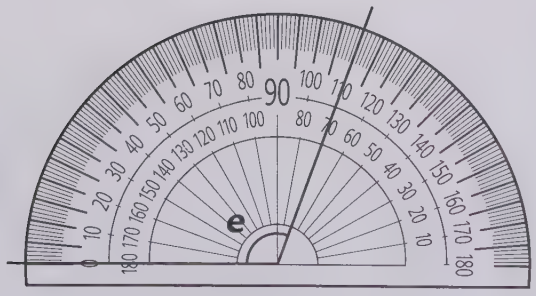
$\angle b =$ ☐



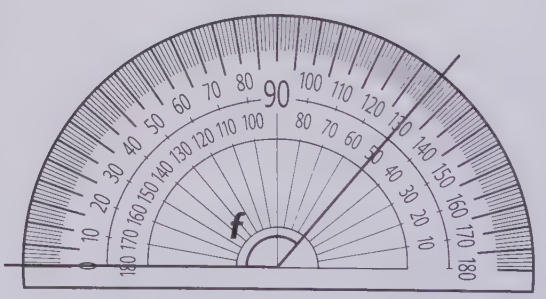
$\angle c =$ ☐



$\angle d =$ ☐



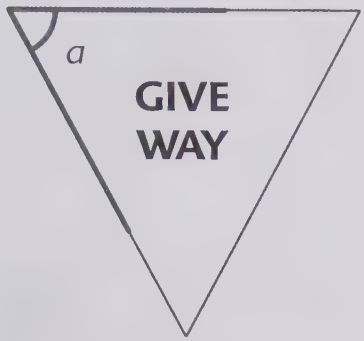
$\angle e =$ ☐



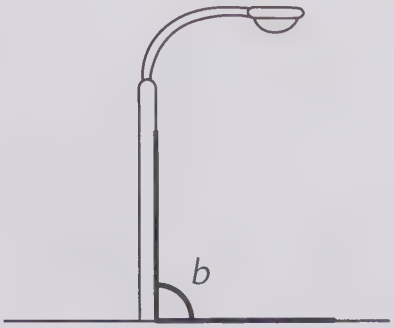
$\angle f =$ ☐

EXERCISE 3

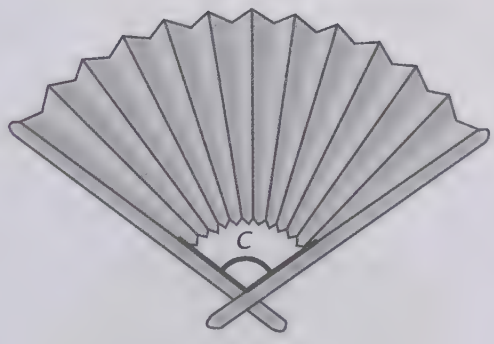
1. Measure the marked angles.



$\angle a =$

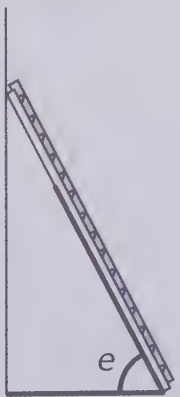


$\angle b =$

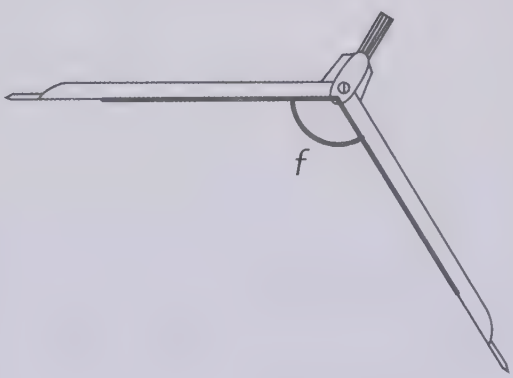


$\angle c =$

$\angle d =$

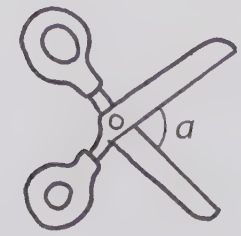


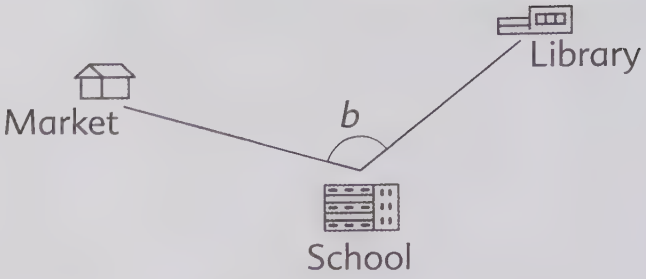
$\angle e =$

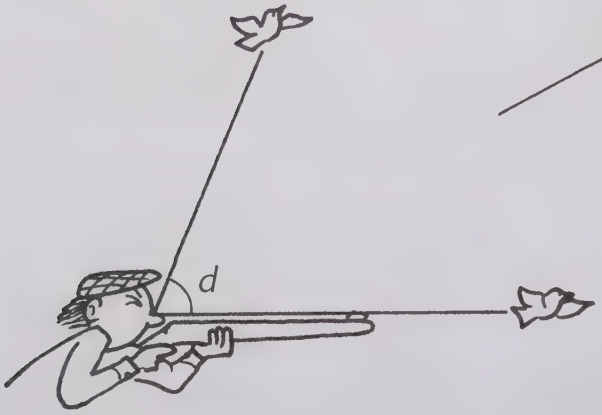


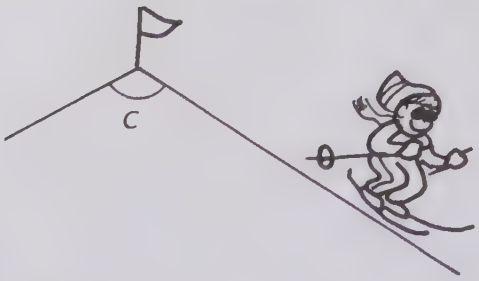
$\angle f =$

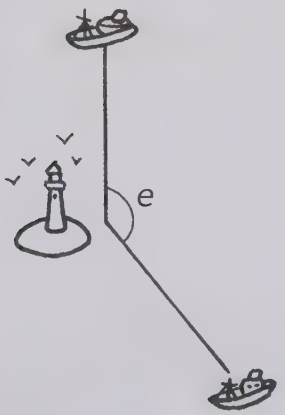
2. Estimate and then measure the marked angles.

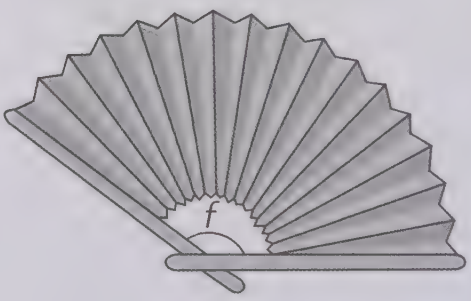








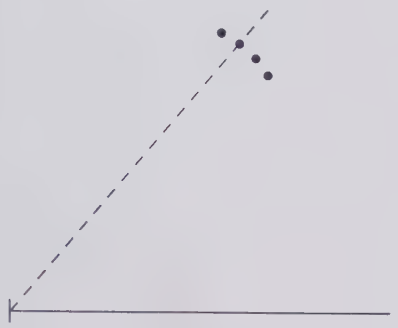




Angle	*a*	*b*	*c*	*d*	*e*	*f*
Estimate						
Measure						

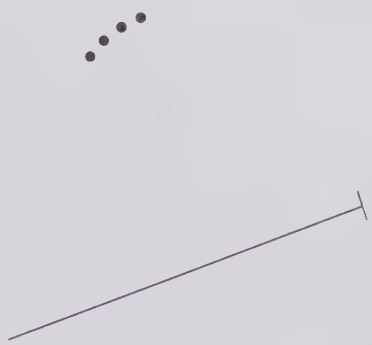
3. Join the marked end point of each line to the correct dot to get the required angle. (Use a protractor to help you choose the correct dot.)
Label the angle.

(a)



$\angle a = 50°$

(b)

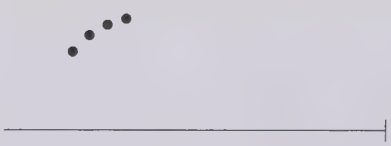


$\angle b = 60°$

(c)

$\angle c = 42°$

(d)

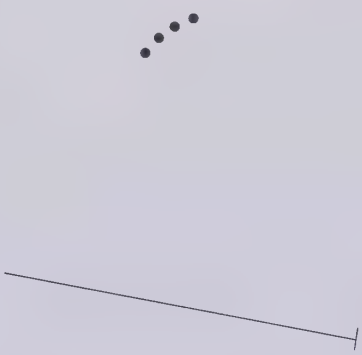


$\angle d = 18°$

(e)

$\angle e = 55°$

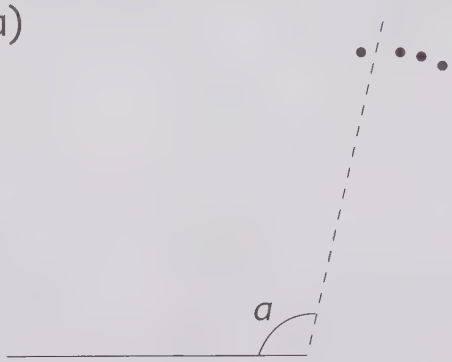
(f)



$\angle f = 47°$

4. Join the marked end point of each line to the correct dot to get the required angle. (Use a protractor to help you choose the correct dot.)
Label the angle.

(a)

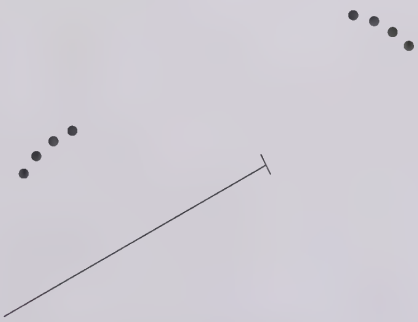


$\angle a = 100°$

(b)

$\angle b = 145°$

(c)

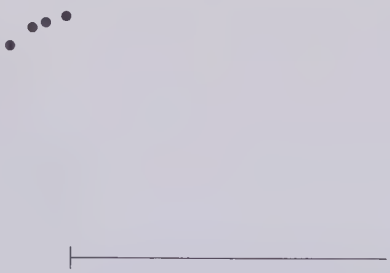


$\angle c = 155°$

(d)

$\angle d = 113°$

(e)



$\angle e = 98°$

(f)

$\angle f = 125°$

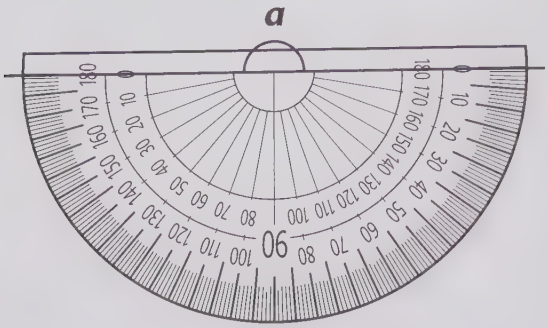
5. Draw an angle equal to 55°.

6. Draw an angle equal to 130°.

EXERCISE 4

1. What is the size of each marked angle?

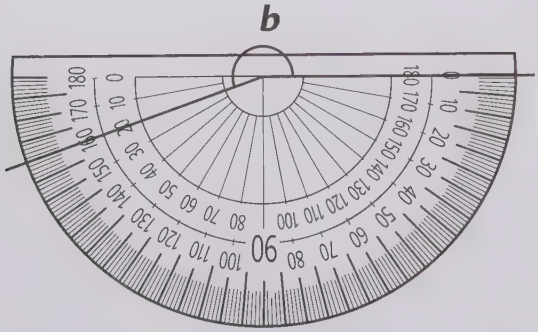
a



$\angle a$ is 180°.

The following angles are greater than 180°.

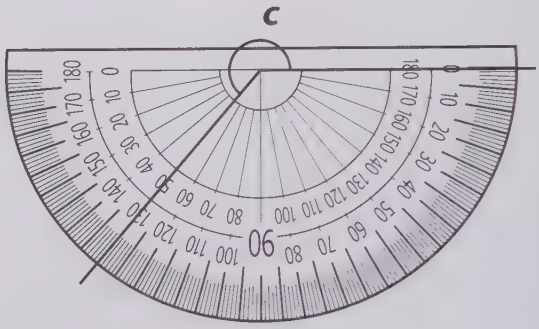
b



$\angle b = 360° - \square$

$= \square$

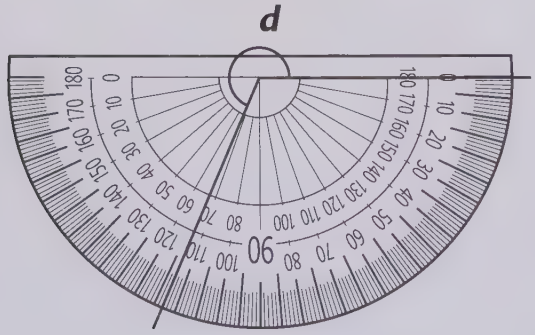
c



$\angle c = 360° - \square$

$= \square$

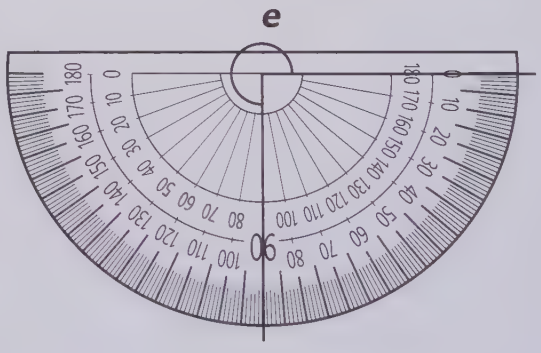
d



$\angle d = 360° - \square$

$= \square$

e

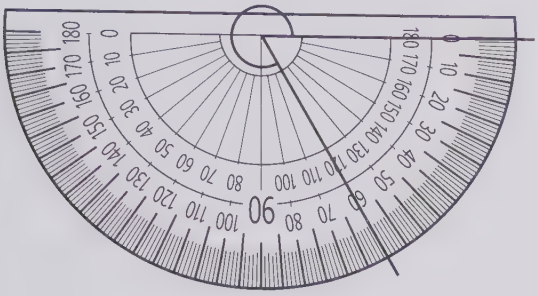


$\angle e = 360° - \square$

$= \square$

2. What is the size of each marked angle?

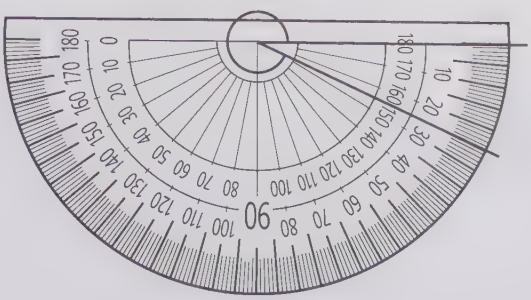
a



$\angle a = 360° - \square$

$= \square$

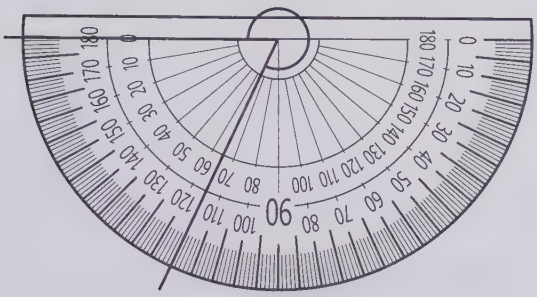
b



$\angle b = 360° - \square$

$= \square$

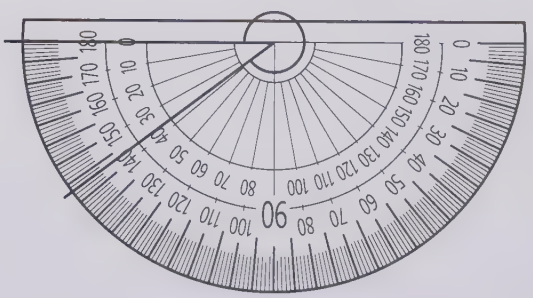
c



$\angle c = 360° - \square$

$= \square$

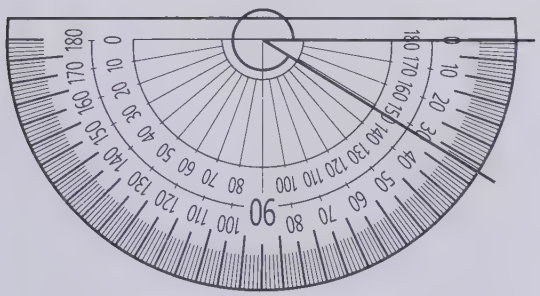
d



$\angle d = 360° - \square$

$= \square$

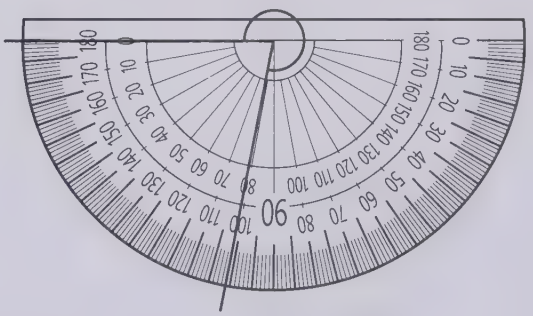
e



$\angle e = 360° - \square$

$= \square$

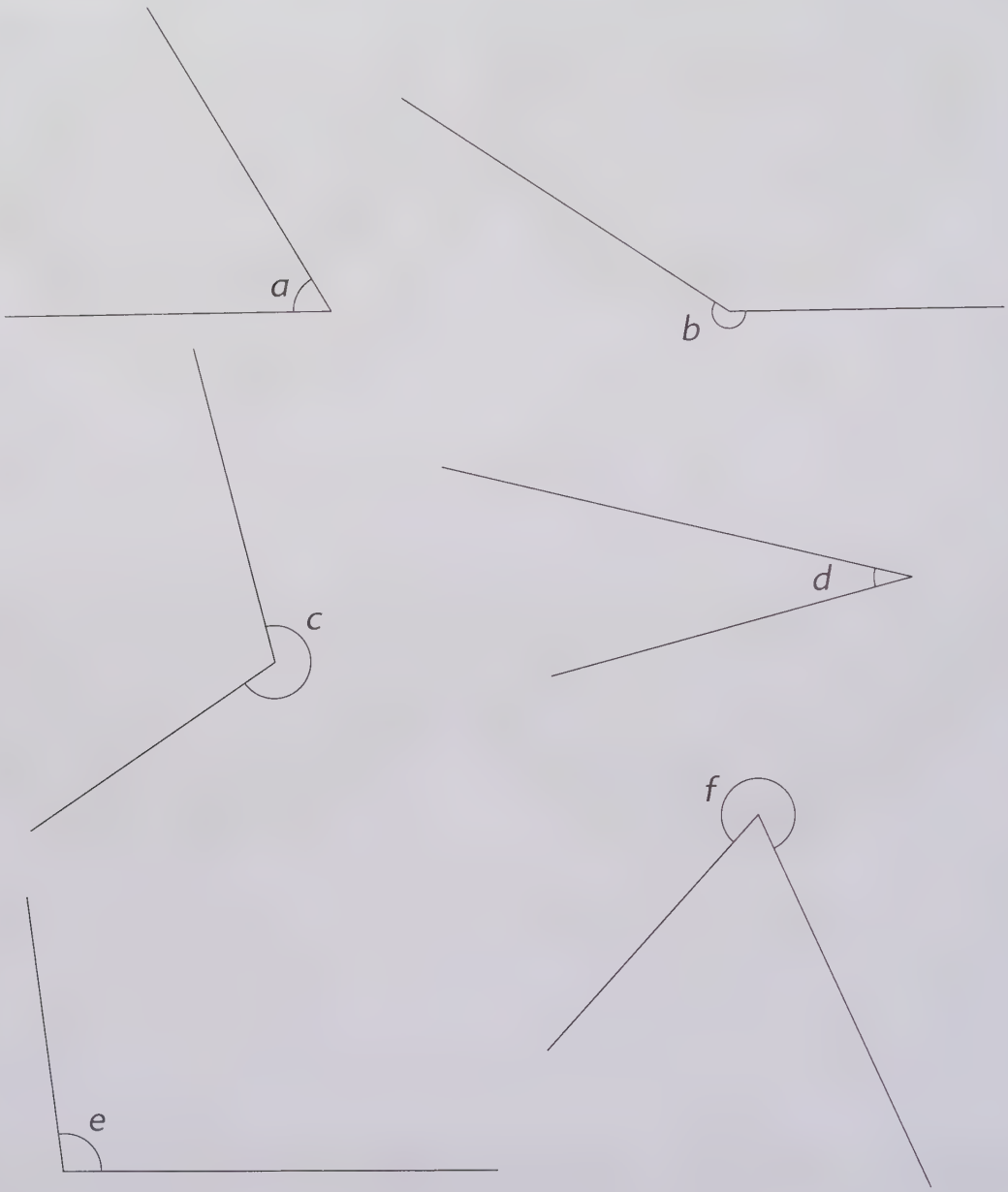
f



$\angle f = 360° - \square$

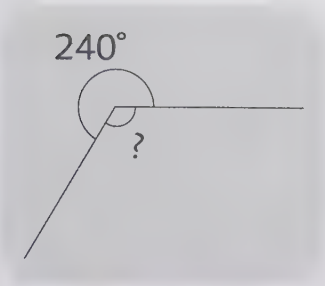
$= \square$

3. Estimate and then measure the marked angles.

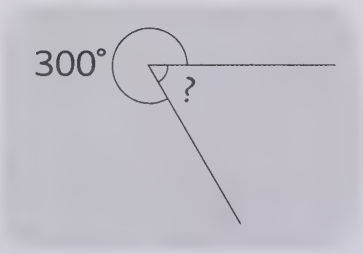


Angle	*a*	*b*	*c*	*d*	*e*	*f*
Estimate						
Measure						

4. Draw an angle equal to 240°.

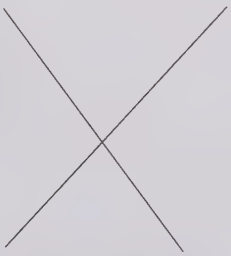
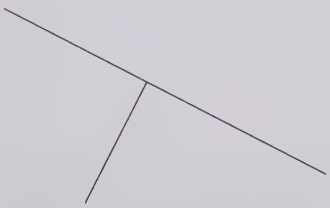
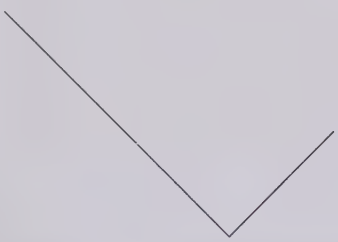
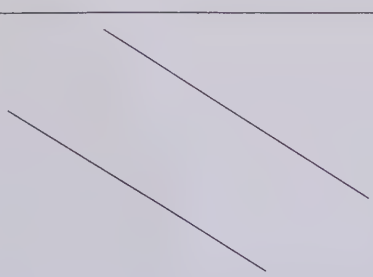


5. Draw an angle equal to 300°.

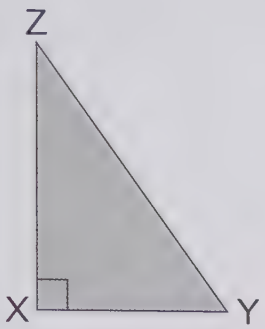


EXERCISE 5

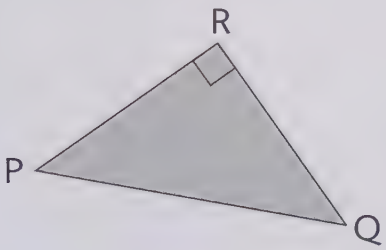
1. Check (✔) the correct answer for each pair of lines.

	The lines are not perpendicular.	The lines are perpendicular.
		
		
		
		

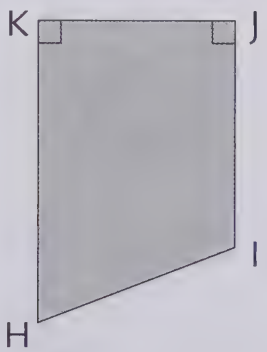
2. Name each pair of perpendicular lines.



XY ⊥ ☐



PR ⊥ ☐



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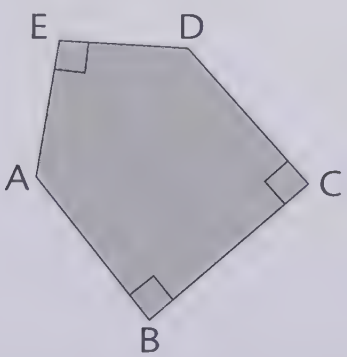

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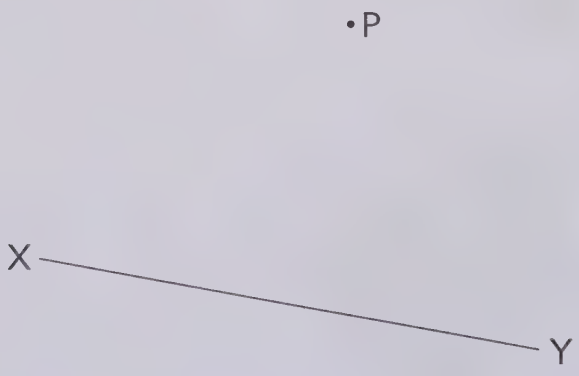
EXERCISE 6

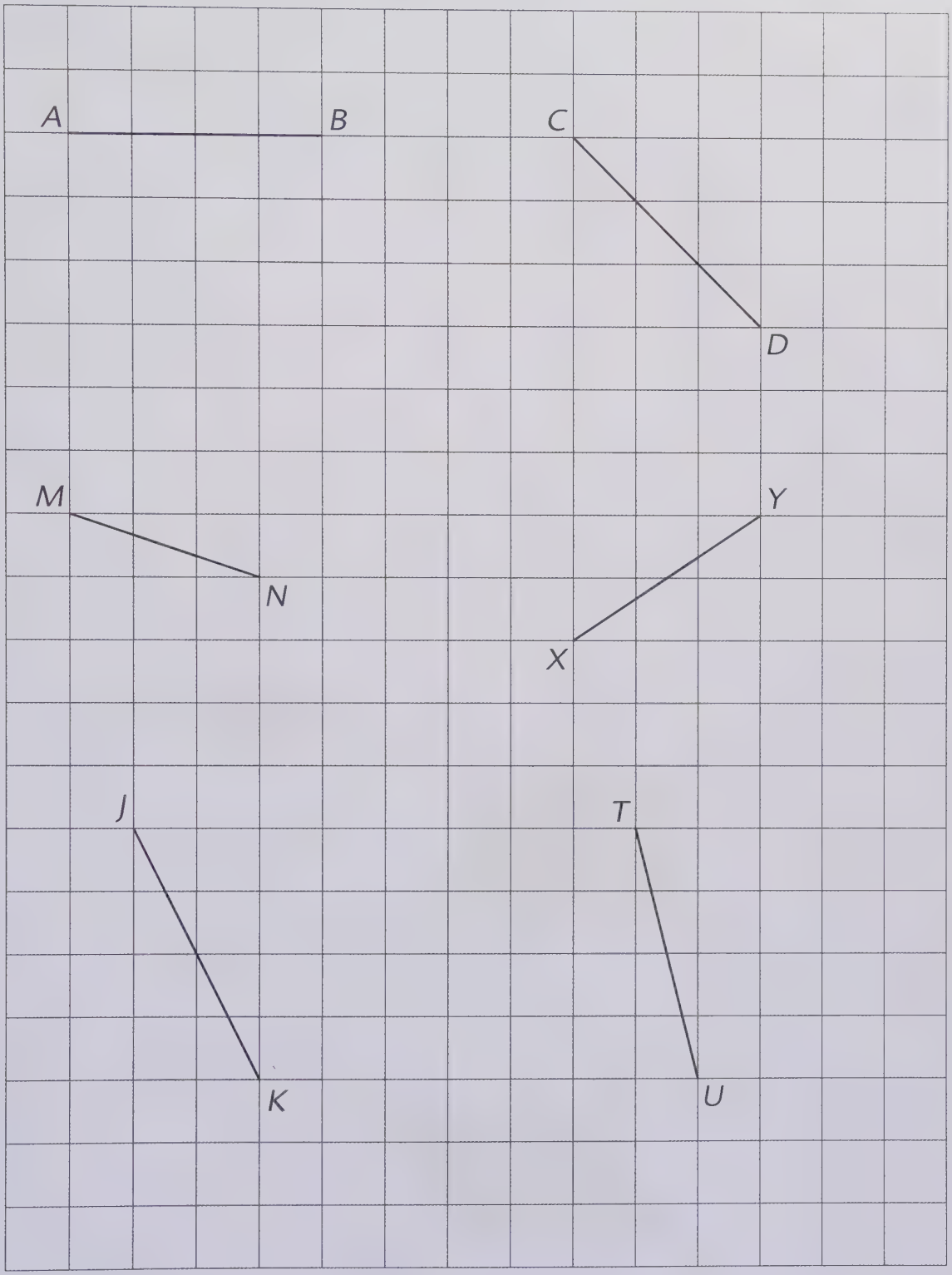
1. Using a set-square and a ruler, draw the following.

   (a) A pair of perpendicular lines

   (b) A line perpendicular to the line XY through the point P

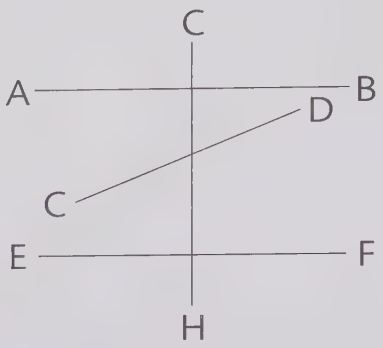


2. Draw a line perpendicular to each of the given lines.

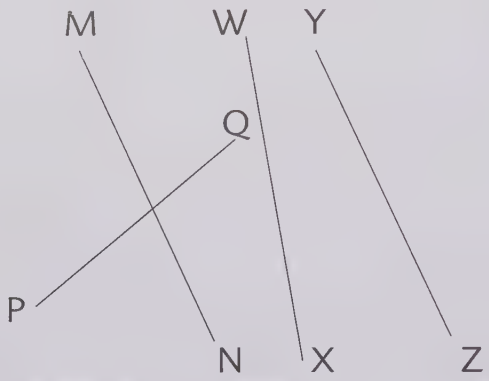


EXERCISE 7

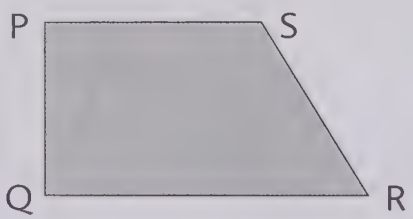
1. Name each pair of parallel lines.



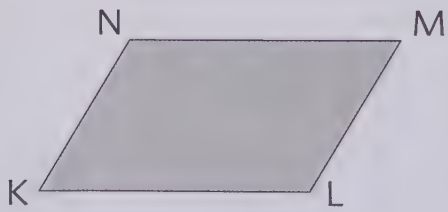
AB // ☐



_____

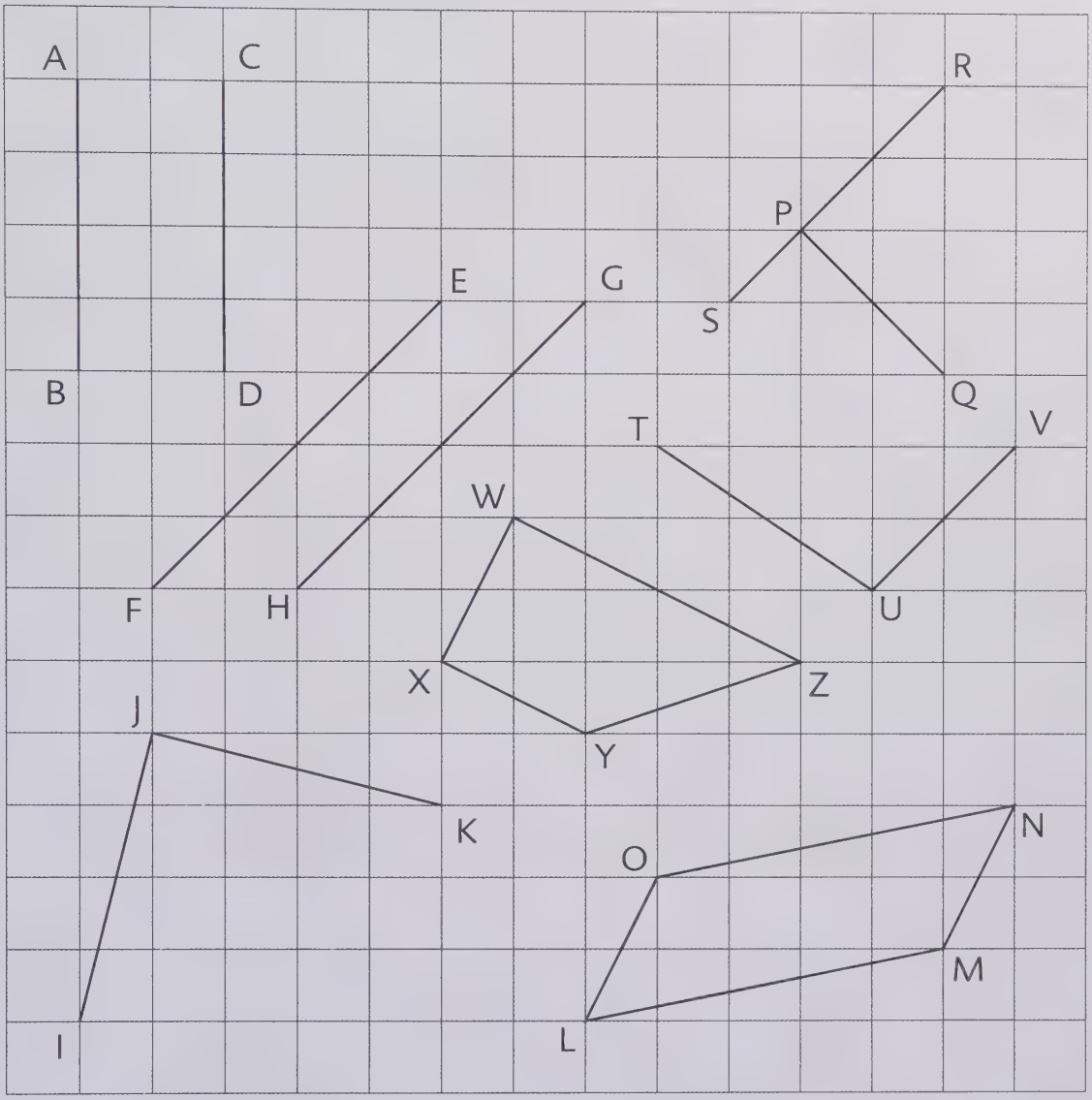


_____



_____

2. List all the pairs of parallel lines and all the pairs of perpendicular lines in the table below.



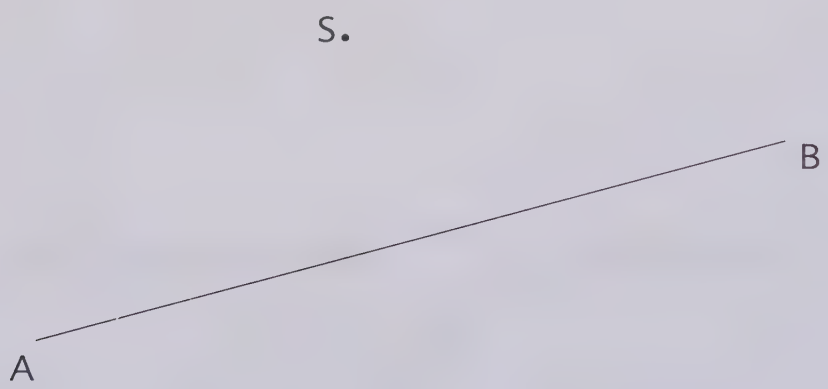
Parallel lines	Perpendicular lines

EXERCISE 8

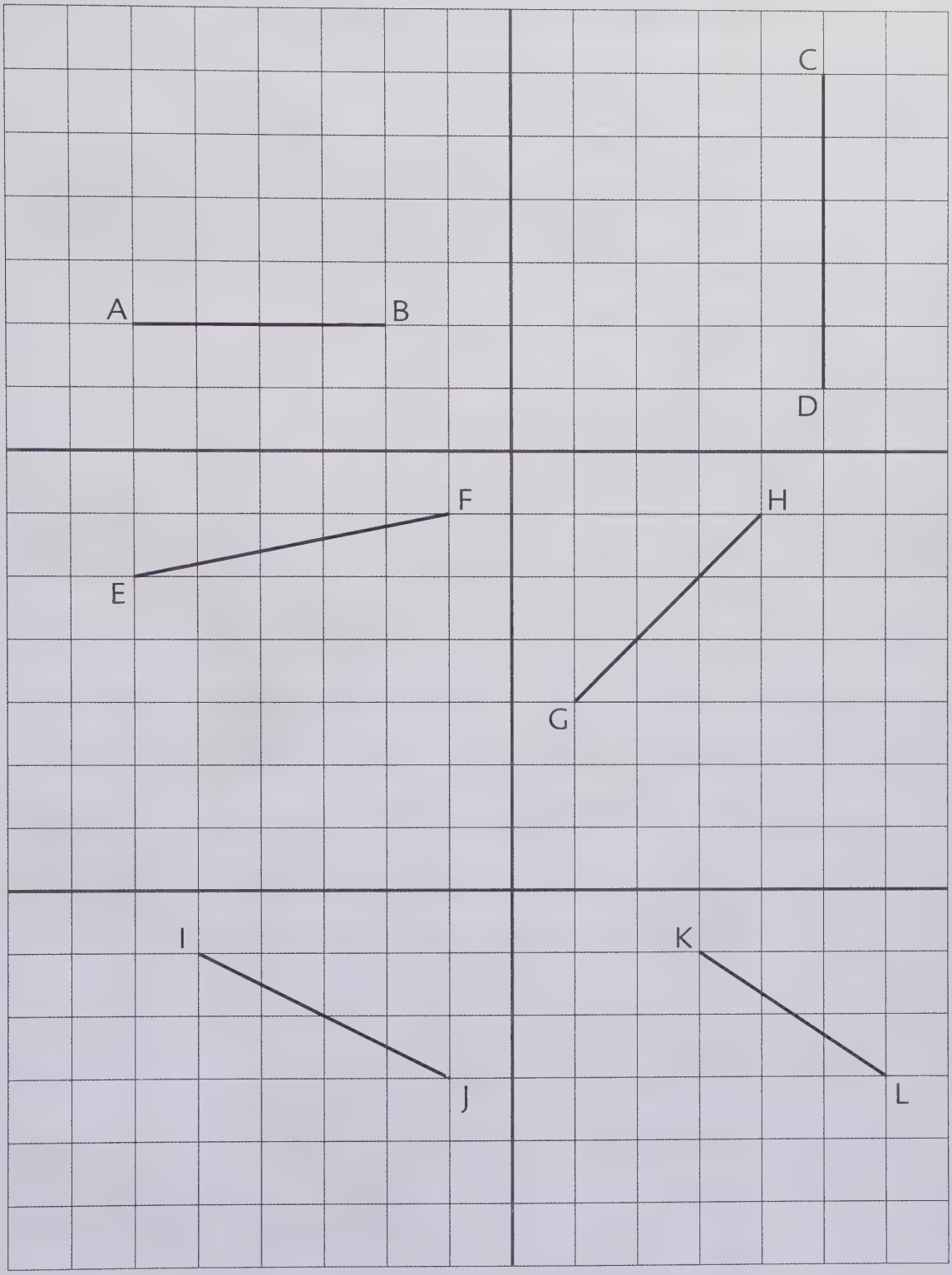
1. Using a set-square and a ruler, draw the following.

   (a) A pair of parallel lines

   (b) A line parallel to the line AB through the point S



2. Draw a line parallel to each of the given lines.



EXERCISE 9

1. Fill in the blanks.

(a) PQRS is a rectangle.

QR = 5 cm

RS = 3 cm

PS =

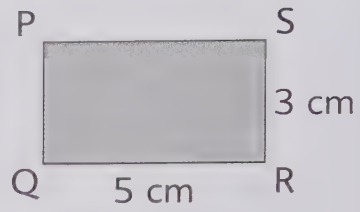
PQ =

QR // _____

PS // _____

PQ ⊥ _____

and _____



(b) WXYZ is a parallelogram.

XY = 10 m

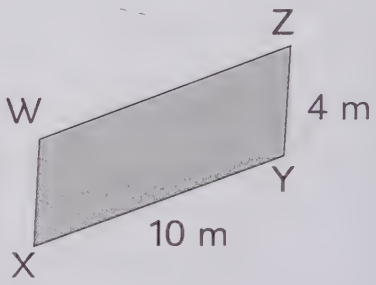
YZ = 4 m

WZ =

WX =

WZ // _____

WX // _____



(c) ABCD is a square.

BC = 8 cm

AB =

CD =

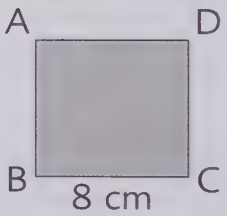
AD =

AB // _____

BC // _____

AB ⊥ _____

and _____



(d) KLMN is a rhombus.

MN = 3 m

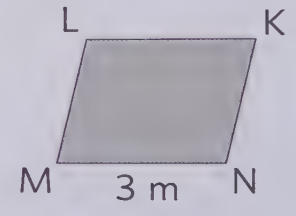
LM =

LK =

NK =

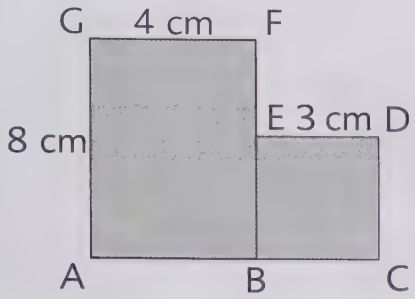
ML // _____

LK // _____



2. Fill in the blanks.

(a) This figure is made up of a rectangle and a square.



GF = 4 cm

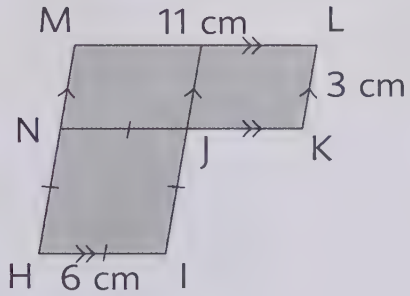
ED = 3 cm

GA = 8 cm

EB =

FE =

(b) This figure is made up of two quadrilaterals.



HI = 6 cm

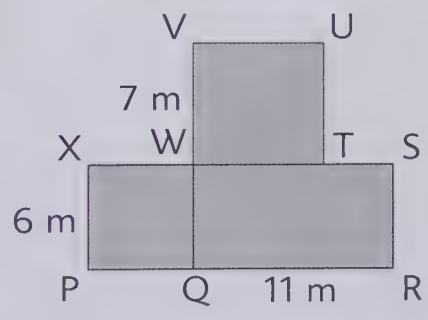
ML = 11 cm

LK = 3 cm

JK =

MH=

(c) This figure is made up of a rectangle and two squares.



WV= 7 m

QR = 11 m

XP = 6 m

TS =

XS =

EXERCISE 10

1. Write 'true' or 'false'.

   (a) AB = AC

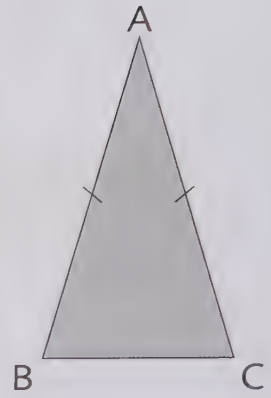
   (b) BC = AB

   (c) ABC is an equilateral triangle.

   (d) ABC is a scalene triangle.

   (e) ABC has two equal sides.

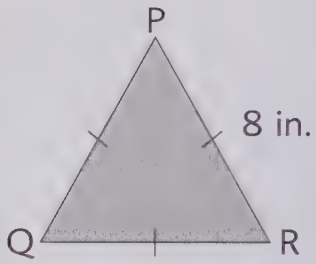
   (f) ABC is an isosceles triangle.



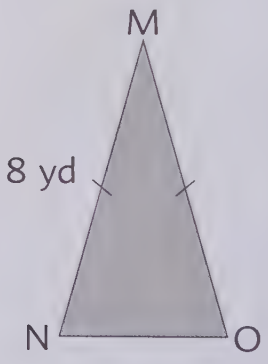
2. Find the length of the unknown sides.

   (a) QR = _____ in.

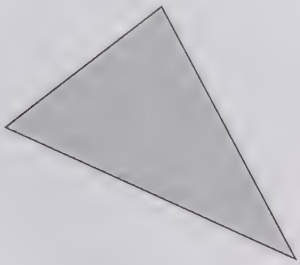
   PQ = _____ in.

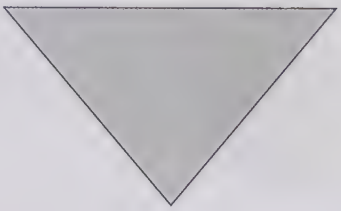


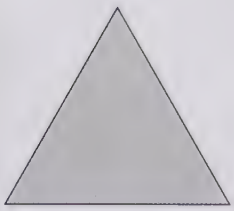
   (b) MO = _____ yd



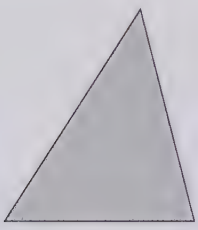
3. Classify each triangle. Write 'isosceles', 'scalene' or 'equilateral' in the blanks.

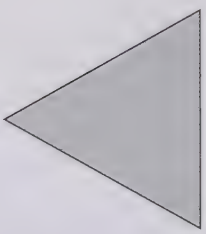






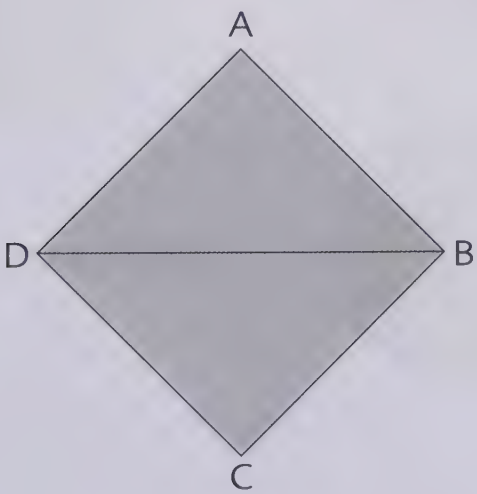
(a) _____ (b) _____ (c) _____





(d) _____ (e) _____

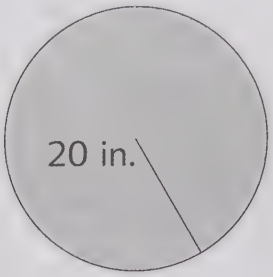
4. ABCD is a square. What type of triangle is ABD?



EXERCISE 11

1. The radius of each circle is given. Find the diameter.

(a)



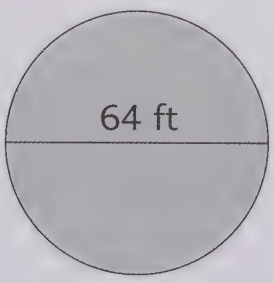
Diameter = _____

(b)

Diameter = _____

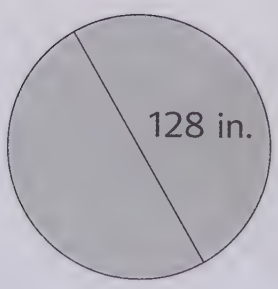
2. The diameter of each circle is given. Find the radius.

(a)



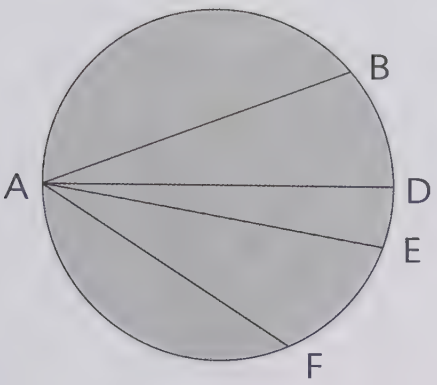
Radius = _____

(b)



Radius = _____

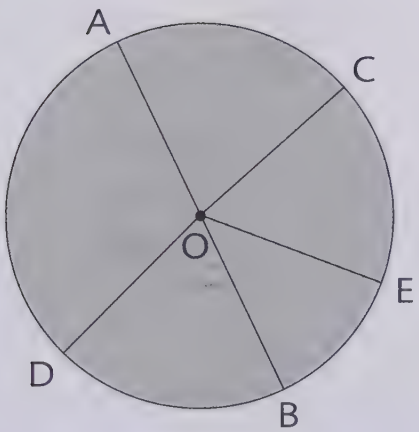
3.



Measure the length of each line.

Which is the longest? _____

4.



O is the center of the circle and AB = 10 cm.

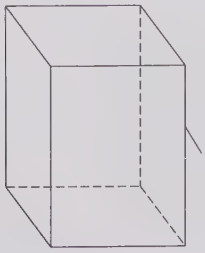
(a) How long is CD? _____

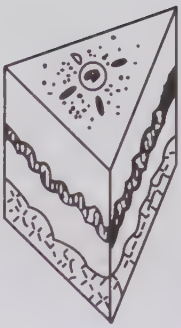
(b) How long is OB? _____

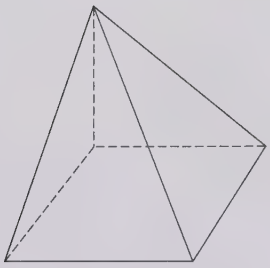
(c) How long is OE? _____

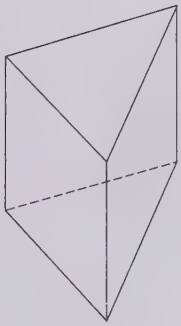
EXERCISE 12

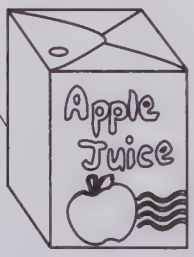
1. Match the figures with the solids.

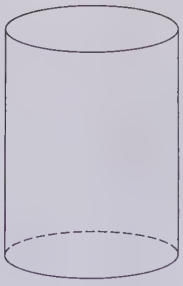


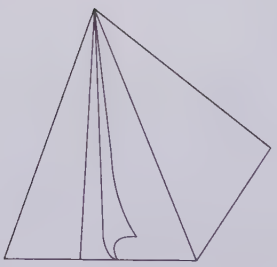




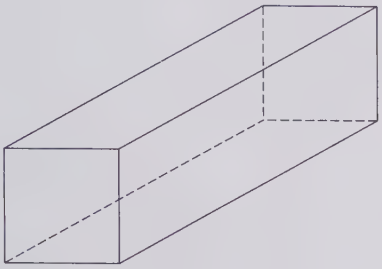
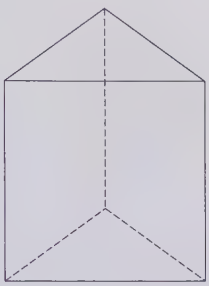
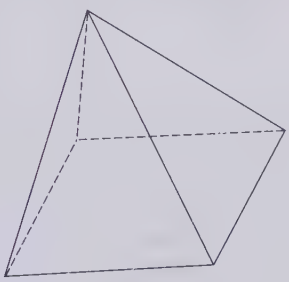
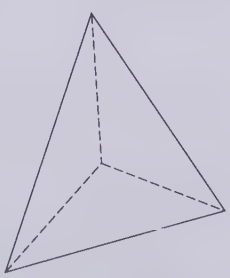






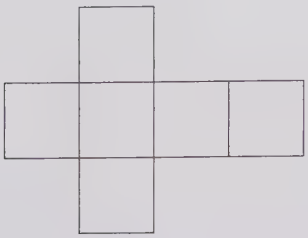


2. Fill in the blanks.

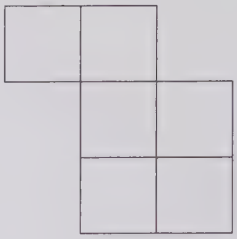
Solid	Number of faces	Number of edges	Number of vertices
(a) Rectangular prism 			
(b) Triangular prism 			
(c) Square pyramid 			
(d) Triangular pyramid 			

EXERCISE 13

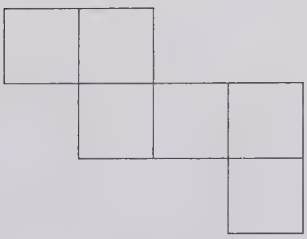
1. Which of the following can be folded to form a cube? Circle the letters below them.



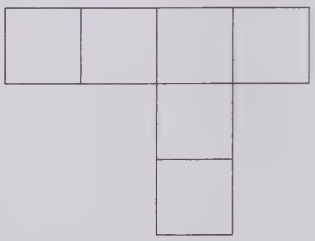
A



B

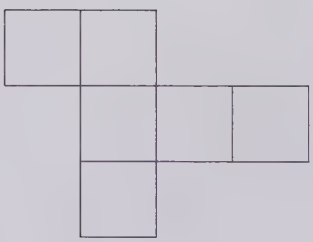


C

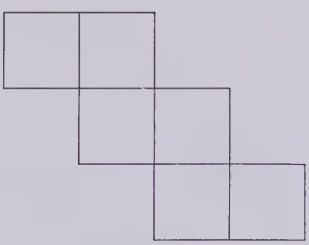


D

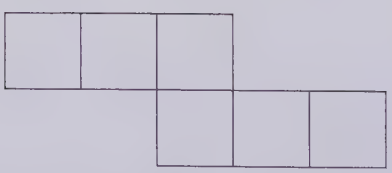
E



F

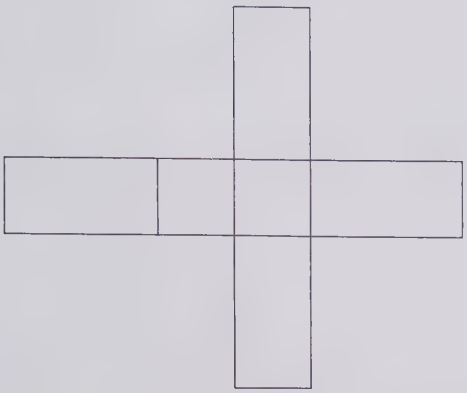


G

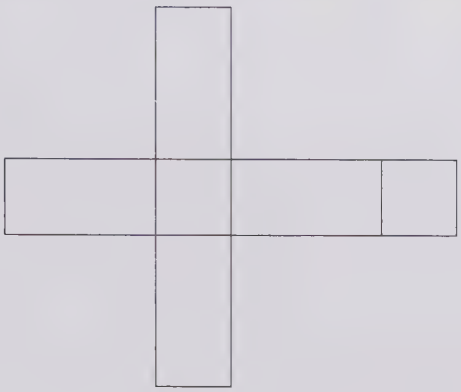


H

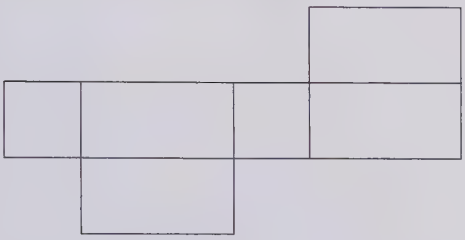
2. Which of the following can be folded to form a rectangular prism? Circle the letters below them.



A

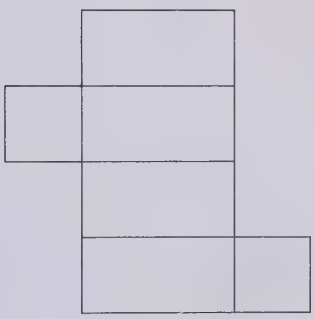


B

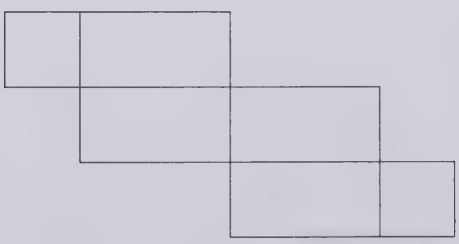


C

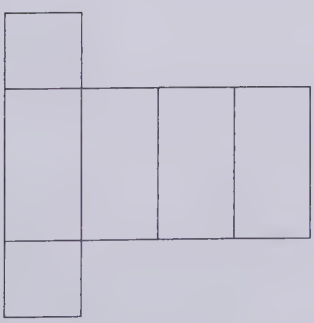
D



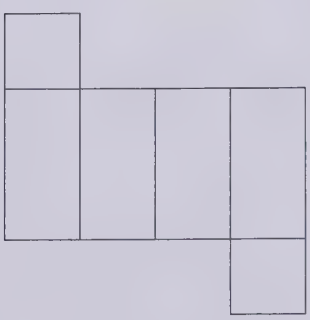
E



F



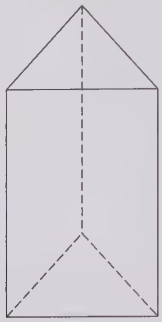
G



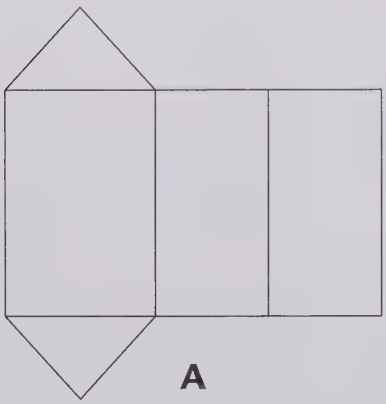
H

EXERCISE 14

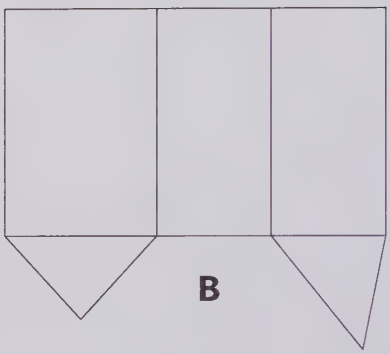
1. This figure shows a solid.



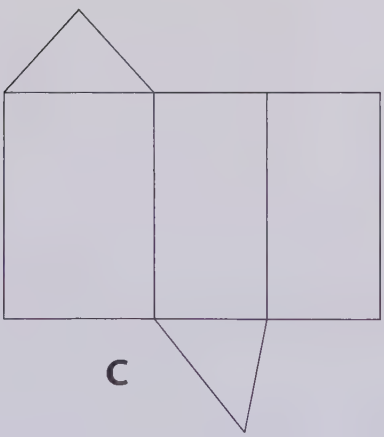
Which of the following can be a net of the solid?
Circle the letters below them.



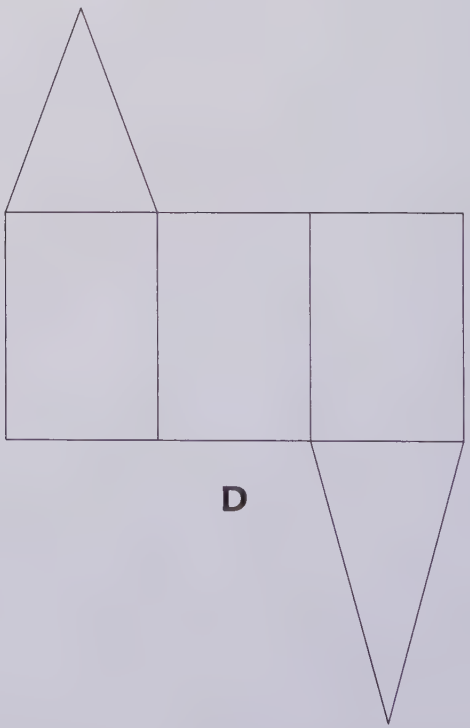
A



B

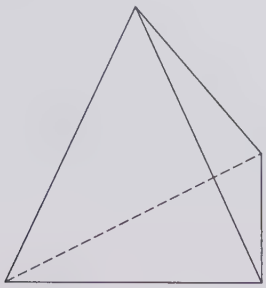


C

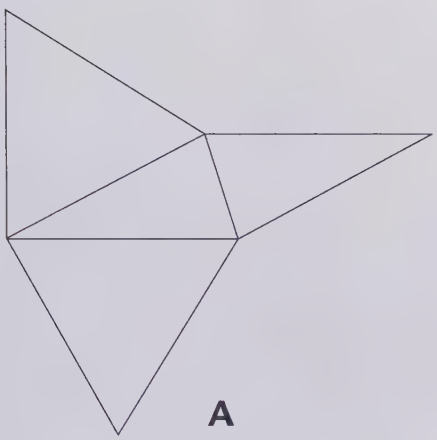


D

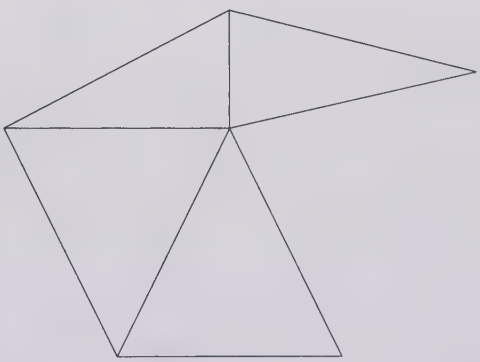
2. This figure shows a solid.



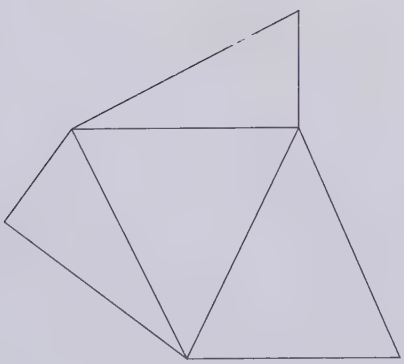
Which of the following can be a net of the solid?
Circle the letters below them.



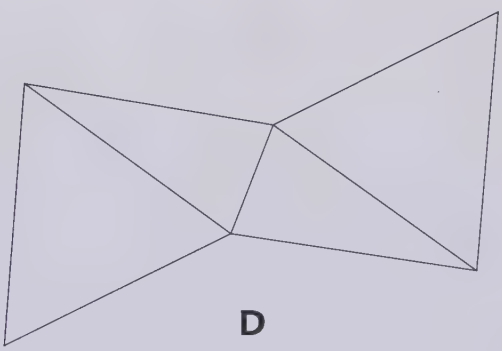
A



B

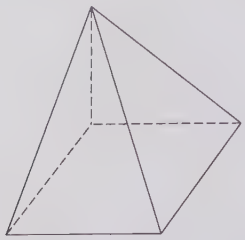


C

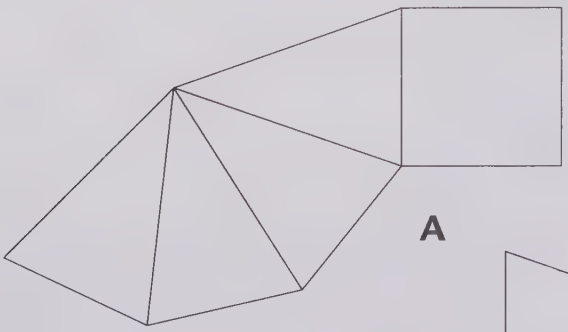


D

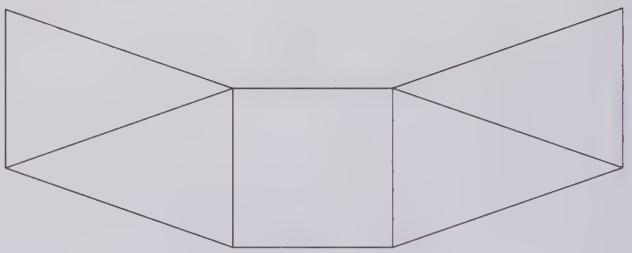
3. This figure shows a solid.



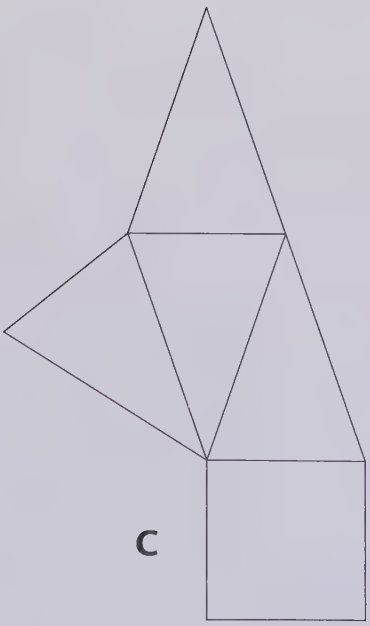
Which of the following can be a net of the solid?
Circle the letters below them.



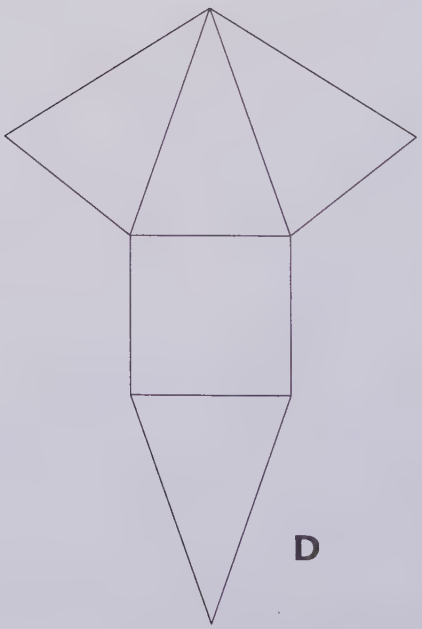
A



B



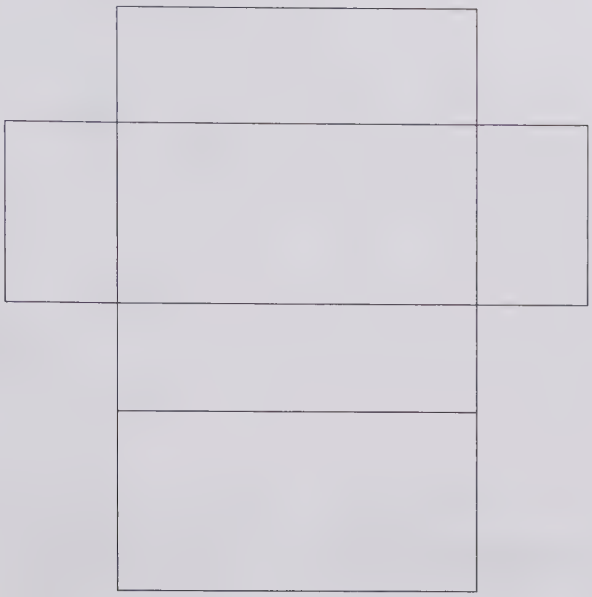
C



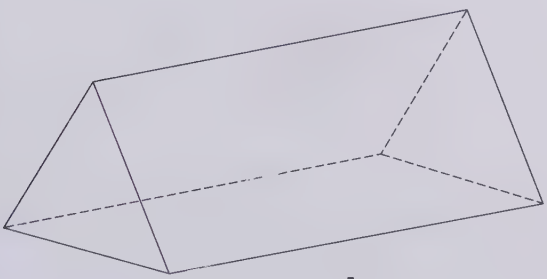
D

EXERCISE 15

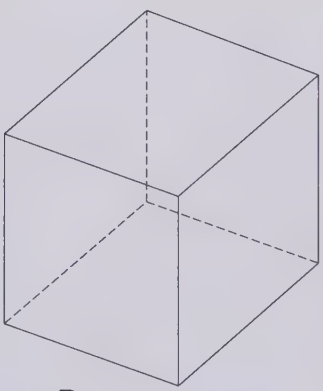
1. This is a net of a solid.



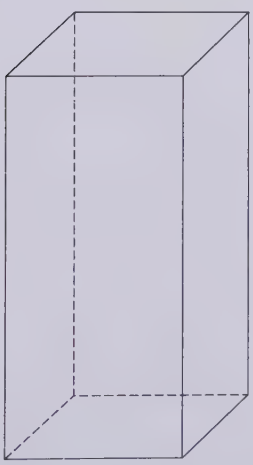
Which one of the following solids can be formed by the net? Circle the letter below it.



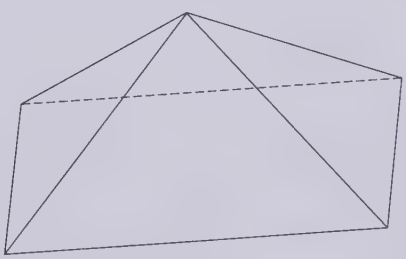
A



B

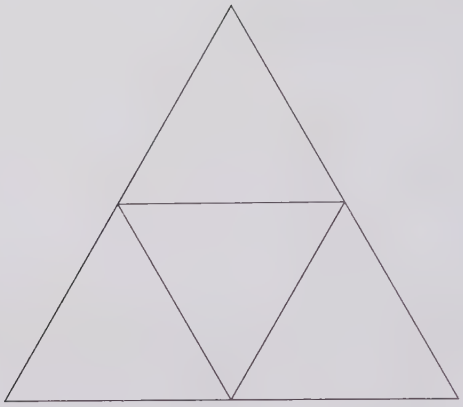


C

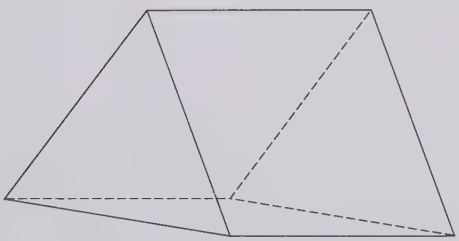


D

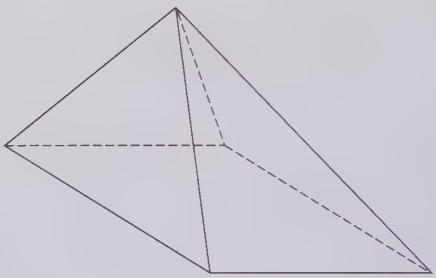
2. This is a net of a solid.



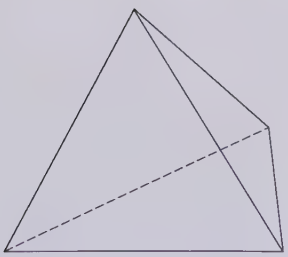
Which one of the following solids can be formed by the net? Circle the letter below it.



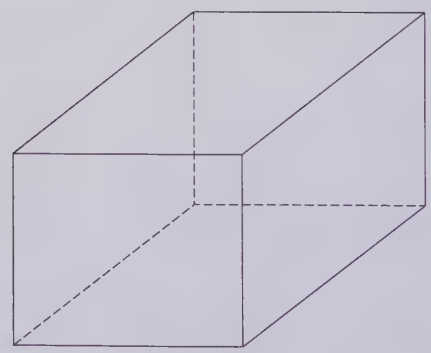
A



B

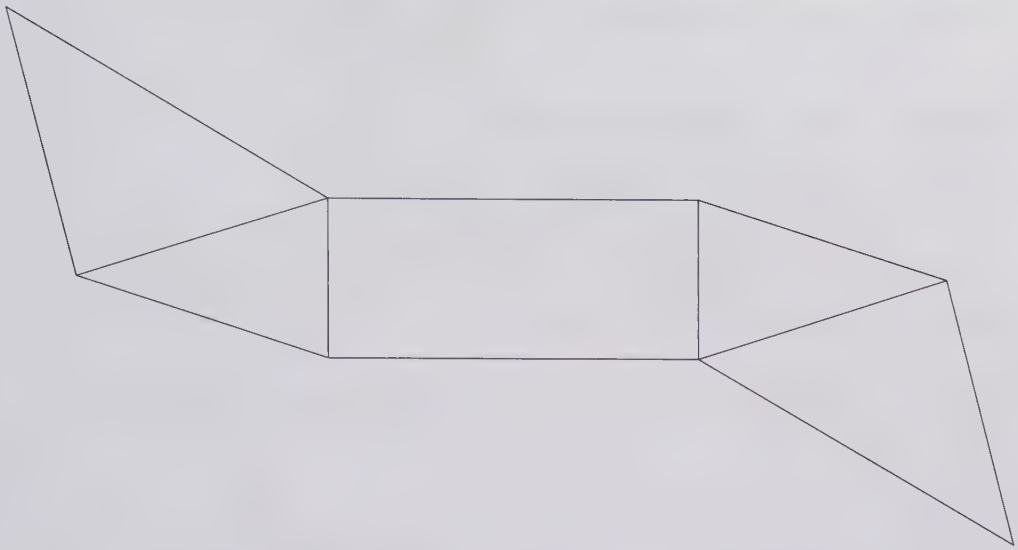


C

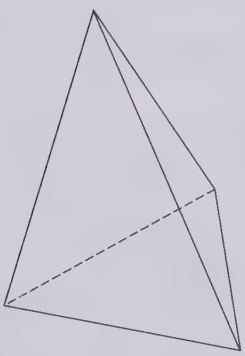


D

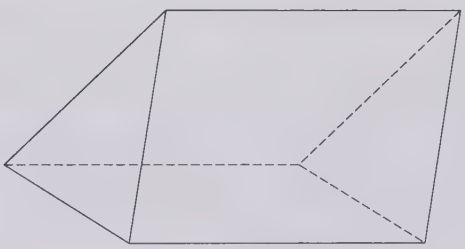
3. This is a net of a solid.



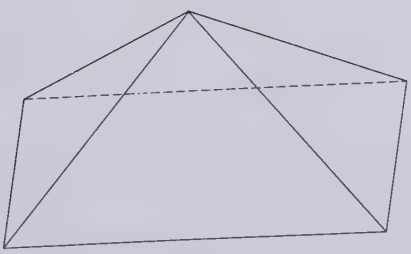
Which one of the following solids can be formed by the net? Circle the letter below it.



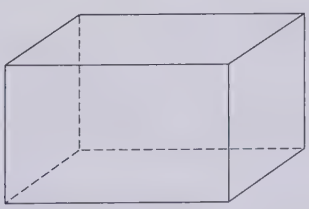
A



B



C



D

REVIEW 4

1. 10,000 more than 46,952 is _____.

2. Which is the greatest number?
   85,320, 85,023, 85,203, 85,302 _____

3. What is the greatest 5-digit number that can be formed using all of the digits 7, 0, 1, 6 and 4? _____

4. Which one of the following is a common factor of 18 and 36?

   4, 6, 12 _____

5. Write down the first five multiples of 8.

   _____, _____, _____, _____, _____

6. Which one of the following is a common multiple of 3 and 5?

   5, 10, 15, 20 _____

7. Suzanne used 132 cm of lace for her wedding dress. Round this length to the nearest 10 cm. _____

8. Round the product of 459 and 24 to the nearest ten thousand. _____

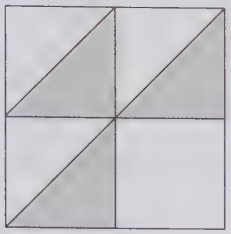
9. Fill in each ◯ with > or <.

   (a) −12 ◯ −10

   (b) 18 ◯ −24

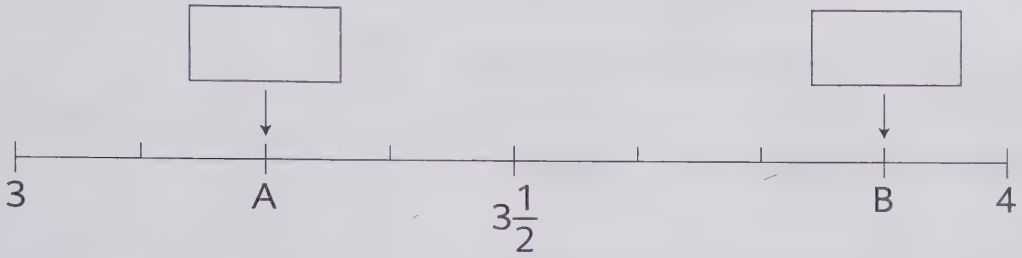
   (c) −20 ◯ 0

10. What fraction of the figure is shaded?



_____

11. Write the number represented by each letter.



12. A computer costs $1857.
This is 3 times the cost of a printer.
How much does the printer cost?

_____

13. If Miguel earns $1460 a month, how much does he earn in 6 months?

_____

14. A piece of wire 64 cm long is bent to form a rhombus. What is the length of each side of the rhombus?

_____

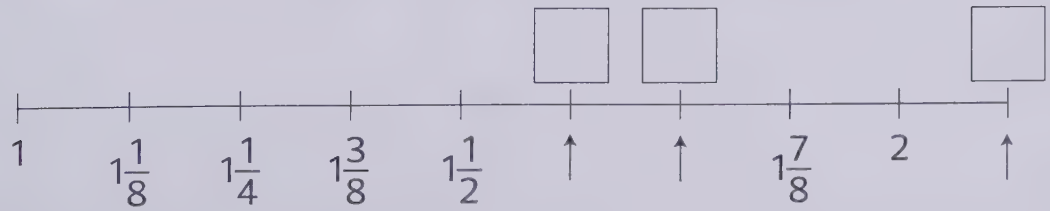
15. Which one of the following is the smallest fraction?
$\frac{2}{5}$, $\frac{3}{4}$, $\frac{4}{7}$

_____

16. Arrange the fractions in order, beginning with the smallest.
$\frac{9}{7}$, $\frac{2}{9}$, $\frac{2}{7}$, $\frac{2}{3}$

_____

17. Write the missing numbers in the number line.



18. What fraction of the fruits are oranges?
Write the fraction in its simplest form. _____

19. Express $2\frac{3}{5}$ as an improper fraction. _____

20. Express $\frac{19}{4}$ as a mixed number. _____

21. Find the product of $\frac{3}{5}$ and 10. _____

22. Rosa wants to tie 6 packages.

She needs $\frac{3}{5}$ yd of string for each package.

How many yards of string must she buy? _____

23. Alice made 50 pizzas.

$\frac{3}{5}$ of them were vegeterian pizzas.

How many vegeterian pizzas did Alice make? _____

24. What fraction of a cake does each girl receive if 8 girls share 2 cakes of the same size equally?

25. Mrs. Lopez bought $\frac{3}{4}$ kg of beans, $\frac{1}{2}$ kg of lettuce, and 1 kg of carrots. How many kilograms of vegetables did she buy altogether?

26. A movie started at 7:15 p.m.

It lasted $2\frac{1}{2}$ hours.

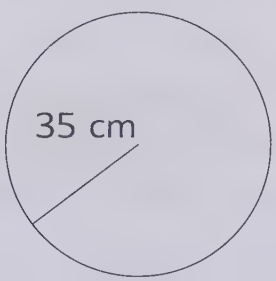
At what time did the movie end? _____

27. Check (✔) the correct boxes.

Shape	Must have two pairs of parallel sides	Must have four equal sides	Must have more than 4 sides	Must have 4 right angles
Square				
Parallelogram				
Pentagon				
Rectangle				
Octagon				
Rhombus				
Trapezoid				

28. The radius of each circle is given. Find the diameter.

(a)



Diameter = _____

(b)

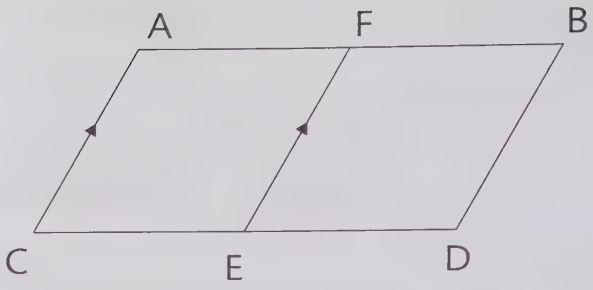
Diameter = _____

29. ABCD is a parallelogram.

AB = 10 cm

AC = 5 cm

CE = 5 cm



(a) How long is CD? _____

(b) How long is EF? _____

30. Match each expression with the correct problem.

(a) $30 \times (40 + 50)$	The price of one 30-cent pencil and fifty 40-cent erasers
(b) $30 + 40 \times 50$	The price of forty 30-cent pencils and a 50-cent eraser
(c) $30 \times 40 + 50$	The price of forty 30-cent red pencils and fifty 30-cent blue pencils

31. Brian made 1185 sticks of chicken kebab. The number of sticks of chicken kebab he made is 3 times the number of sticks of beef kebab. How many sticks of beef kebab did he make?

32. A baker sold 35 packets of biscuits. Each packet contained 150 biscuits. How many biscuits did he sell altogether?

---

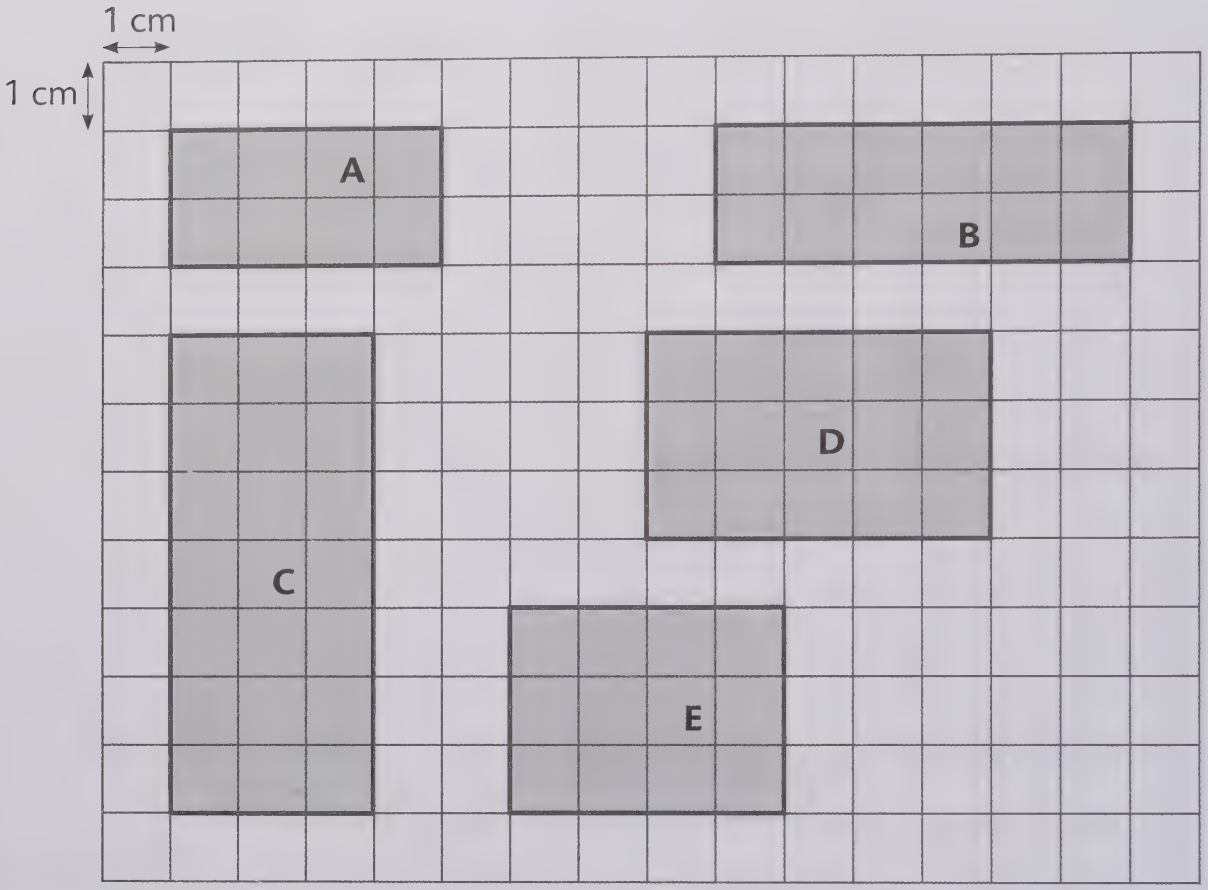
33. Devi bought some ribbon. She used $\frac{5}{8}$ of the ribbon to make some bows. She had 6 yards of ribbon left.

    (a) How many yards of ribbon did she use for the bows?

    (b) If she made 6 bows, how many yards was each bow?

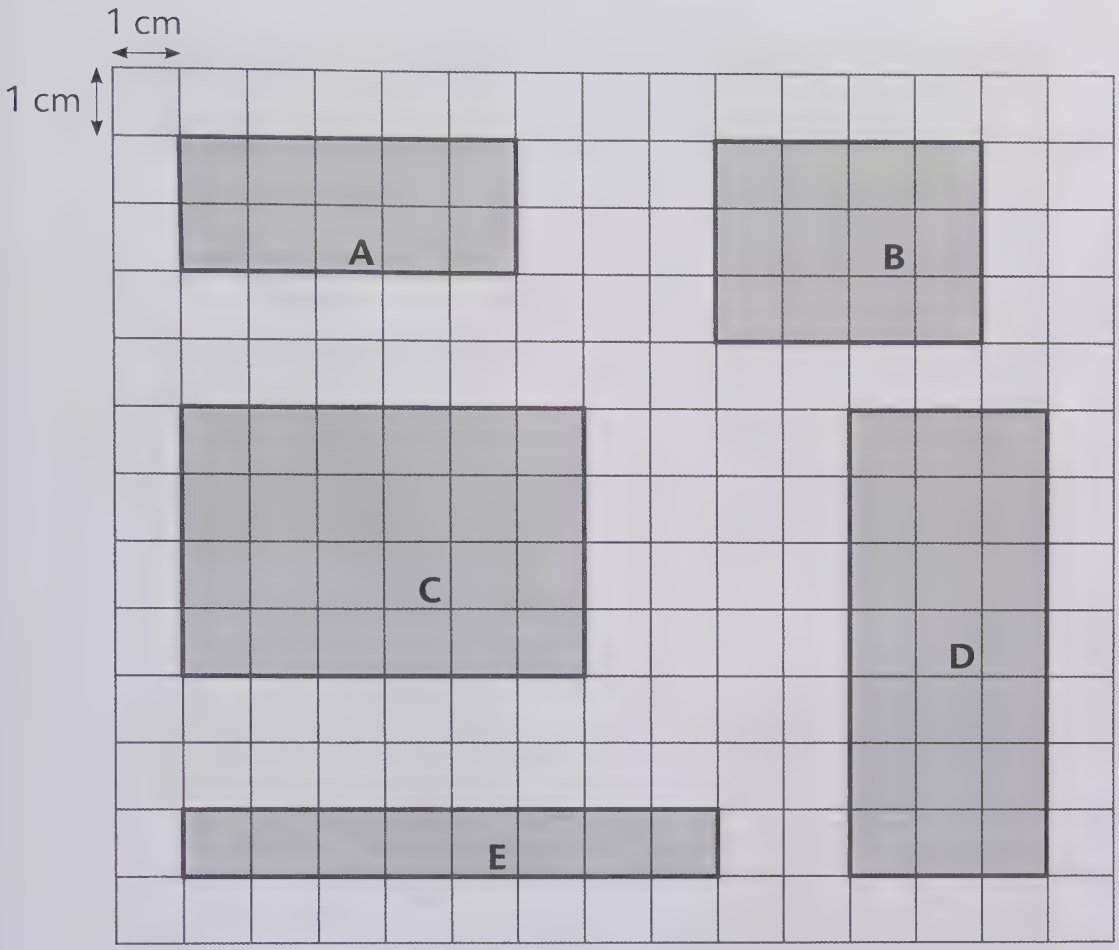
EXERCISE 1

1. Write down the length and width of each rectangle. Then multiply the length and width to find the area of the rectangle.



Rectangle	Length	Width	Area
A	4 cm	2 cm	8 cm^2
B			
C			
D			
E			

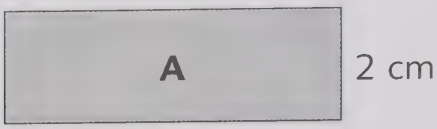
2. Find the area of each rectangle by multiplying its length and its width.



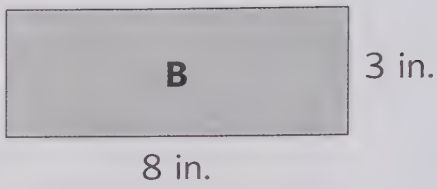
Rectangle	Length	Width	Area
A	5 cm	2 cm	10 cm^2
B			
C			
D			
E			

3. Find the area of each rectangle.

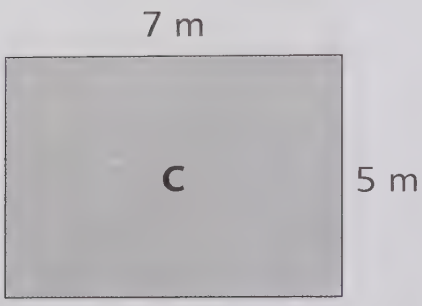
(a)



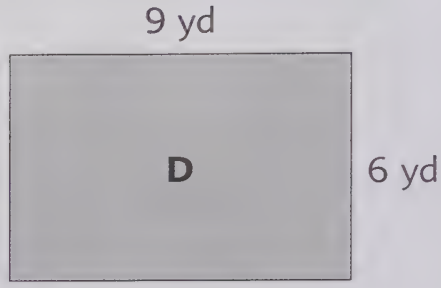
(b)



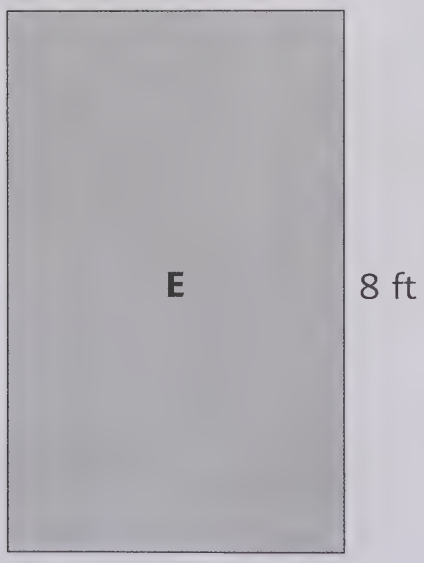
(c)



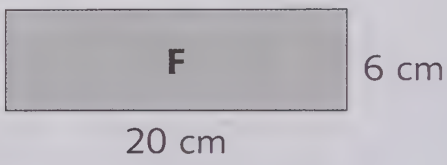
(d)



(e)



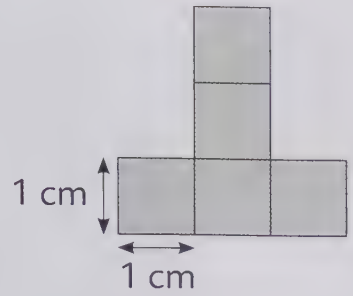
(f)



Rectangle	A	B	C	D	E	F
Area	12 cm^2					

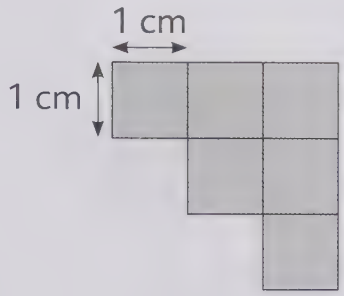
EXERCISE 2

1. Write down the area and perimeter of each figure.



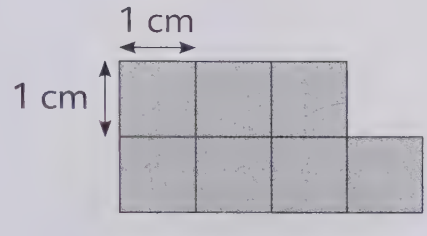
The area is _____ cm^2.

The perimeter is _____ cm.



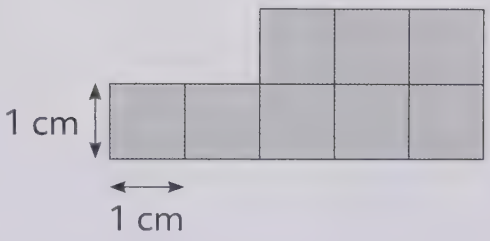
The area is _____ cm^2.

The perimeter is _____ cm.



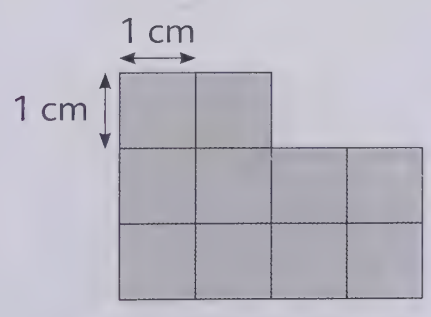
The area is _____ cm^2.

The perimeter is _____ cm.



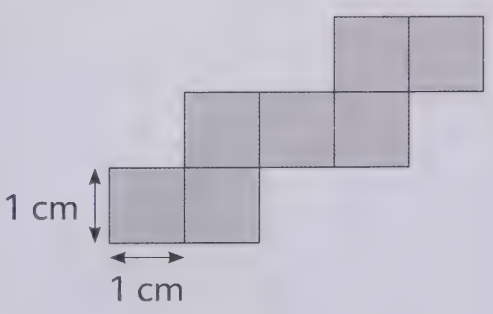
The area is _____ cm^2.

The perimeter is _____ cm.



The area is _____ cm^2.

The perimeter is _____ cm.

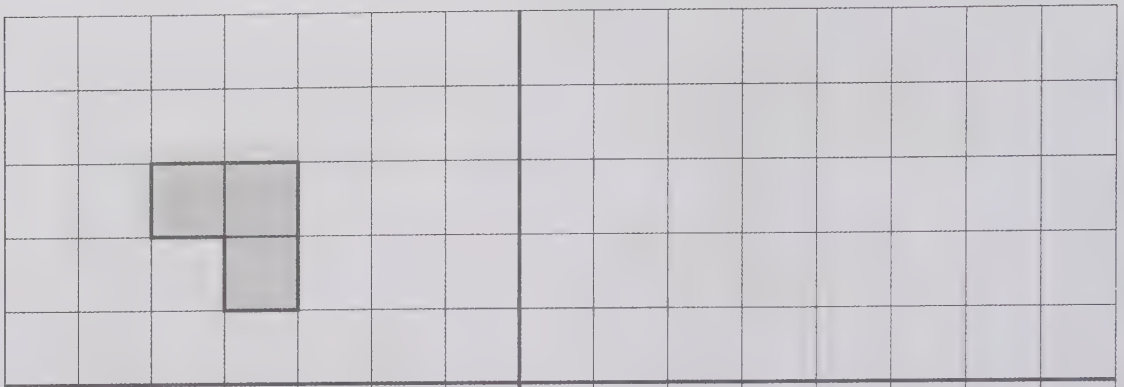


The area is _____ cm^2.

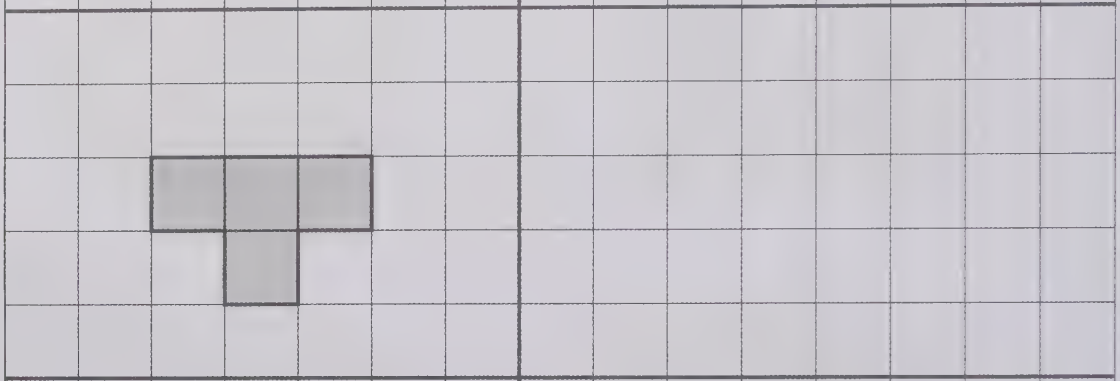
The perimeter is _____ cm.

2. Draw another figure of the same area and perimeter as the given figure.

(a)

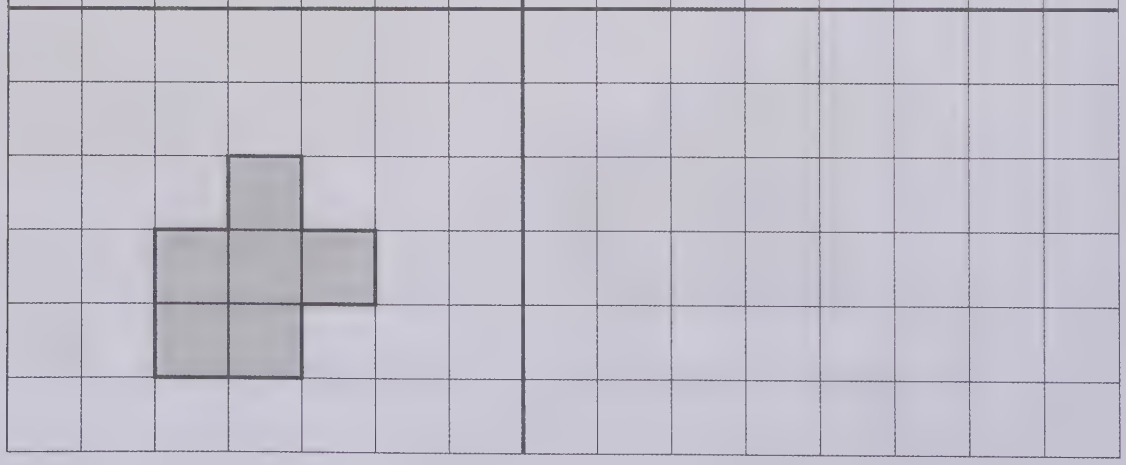


(b)



(c)

(d)



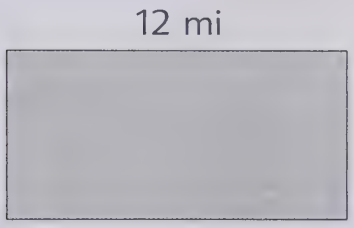
3. Find the area and perimeter of each rectangle or square.

(a)

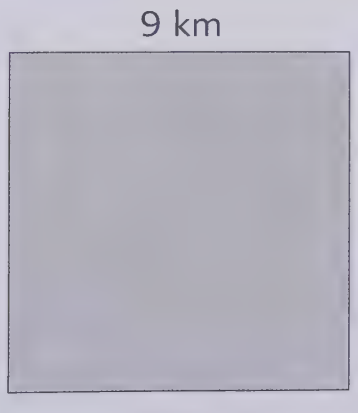
$A = l \times w$
$= 10 \times 4$
$=$
The area is _____ cm^2.

$P = 2 \times (l + w)$
$= 2 \times (10 + 4)$
$=$
The perimeter is _____ cm.

(b)



(c)



4. Find the area and perimeter of each rectangle or square. Then complete the table below.

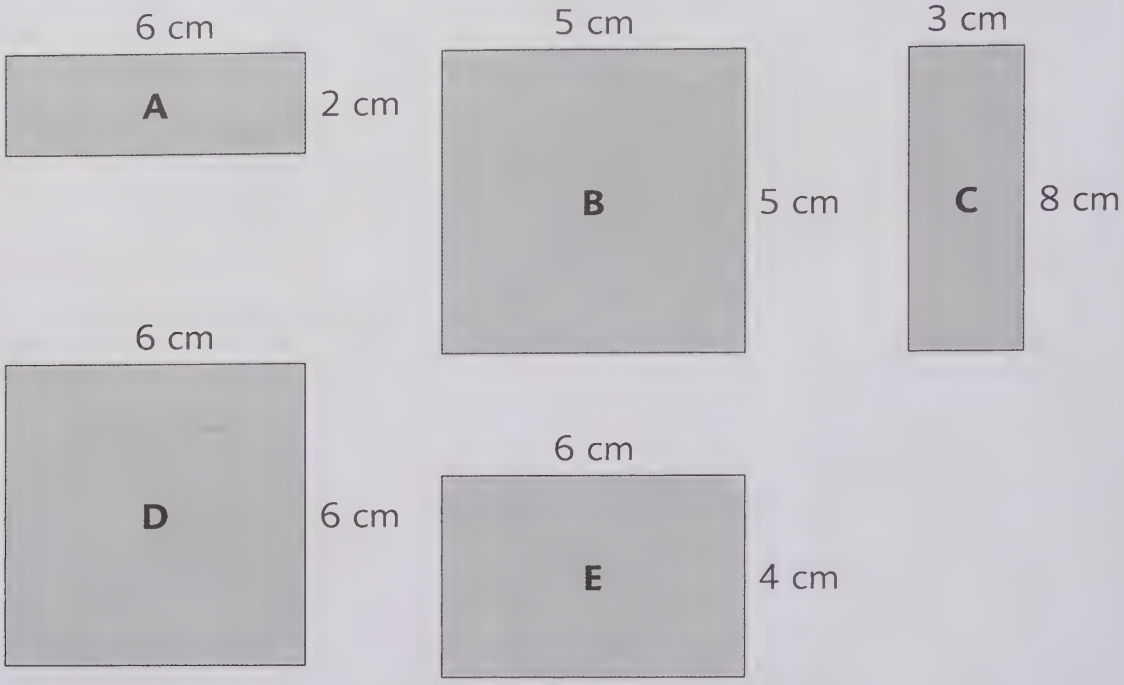


Figure	Area	Perimeter
A		
B		
C		
D		
E		

(a) Which two figures have the same area? _____

(b) Which two figures have the same perimeter? _____

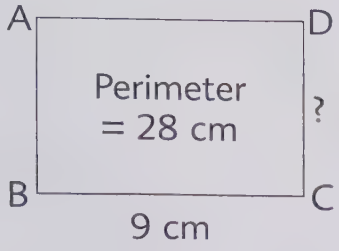
(c) Find the difference in area between Figure B and Figure D. _____

(d) Find the difference in perimeter between Figure B and Figure C. _____

EXERCISE 3

1. Find the unknown side and the area of each of the following rectangles.

(a)

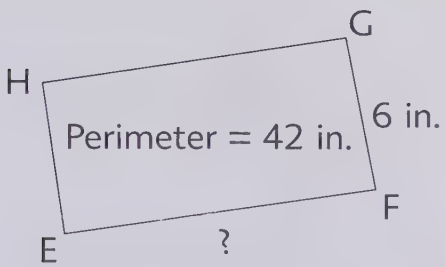


Length + width = 28 ÷ 2 = 14 cm

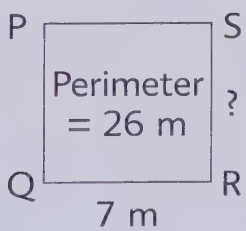
CD = 14 − 9 =

Area =

(b)



(c)



2. Find the unknown side and the perimeter of each of the following rectangles.

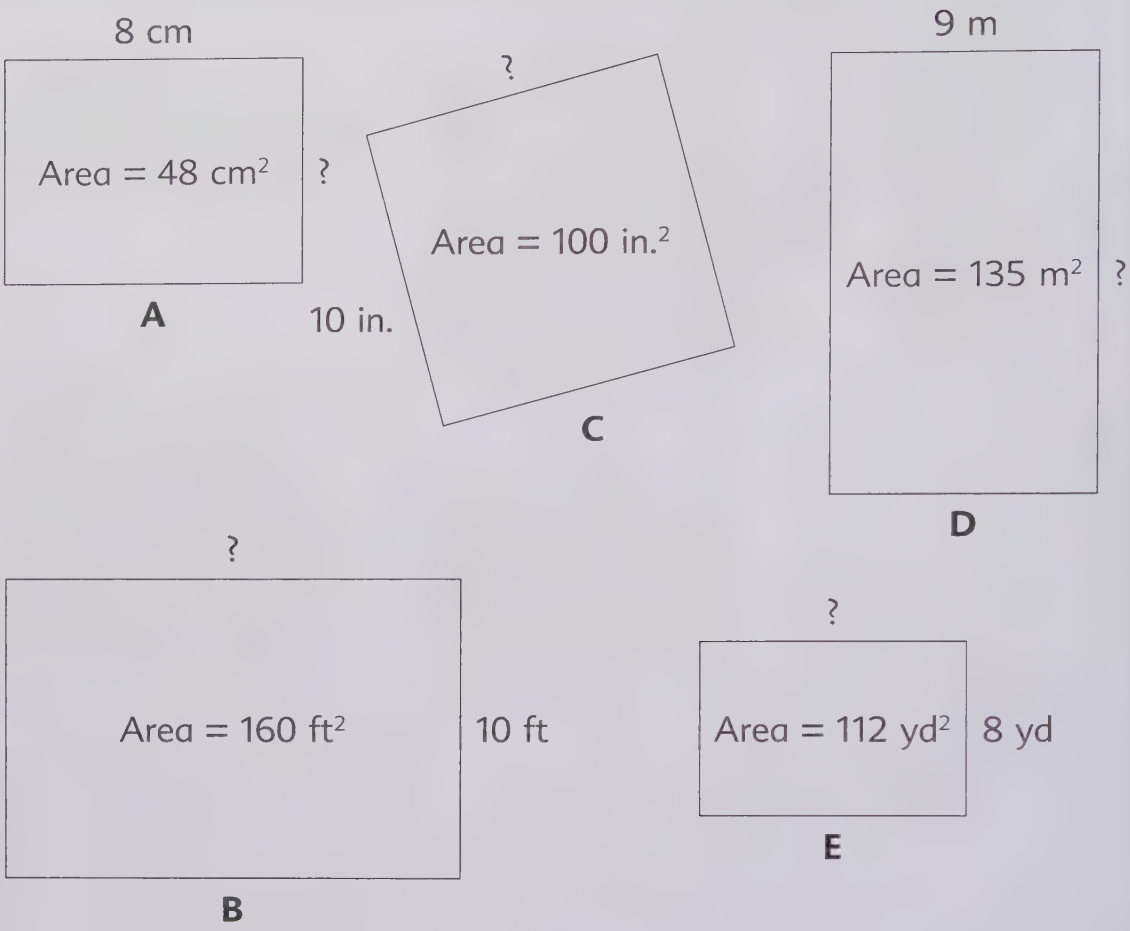
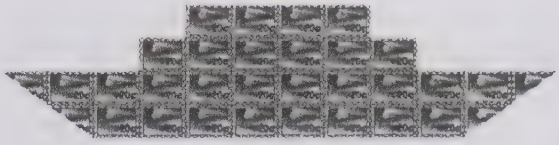


Figure	Area	Length	Width	Perimeter
A	48 cm^2	8 cm		
B	160 ft^2		10 ft	
C	100 $in.^2$	10 in.		
D	135 m^2		9 m	
E	112 yd^2		8 yd	

3. Jane uses 30 old stamps to make a picture. If each stamp measures 4 cm by 3 cm, find the area of the picture.



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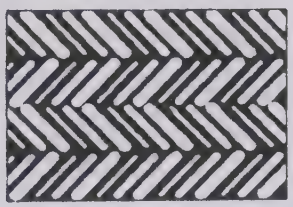
4. It costs $12 a square yard to carpet the floor of a room. If the floor of the room is 5 yd long and 4 yd wide, find the cost of carpeting the floor of the room.



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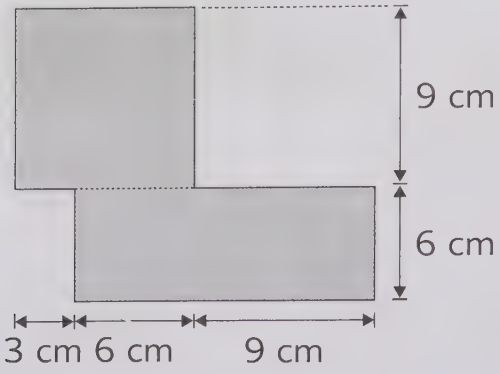
5. A rectangular field measures 40 m by 30 m. What is the cost of putting up a fence around it if 1 m of fencing costs $7?

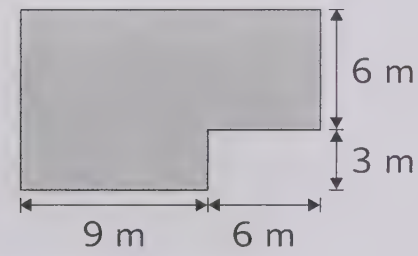
EXERCISE 4

1. Find the perimeter of each of the following figures. (All the lines meet at right angles.)

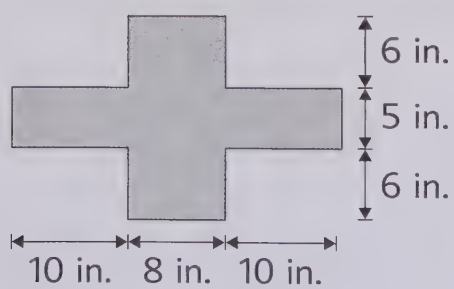
(a)



(b)

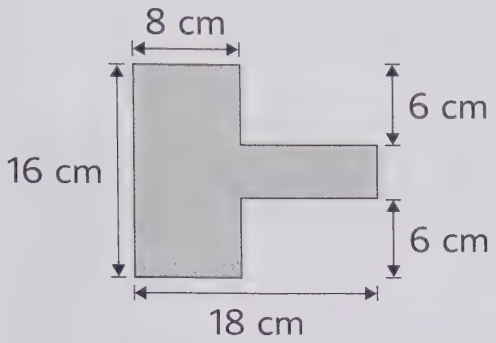


(c)

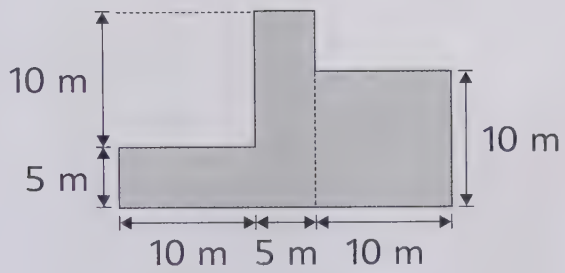


2. Find the perimeter of each of the following figures.
(All the lines meet at right angles.)

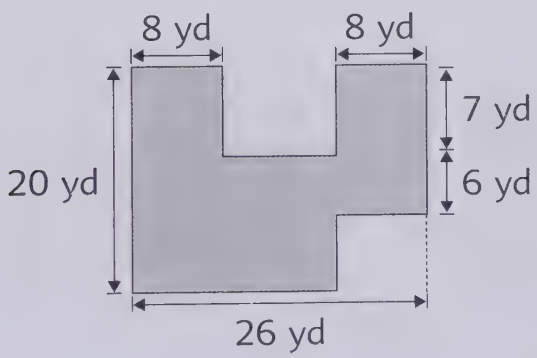
(a)



(b)



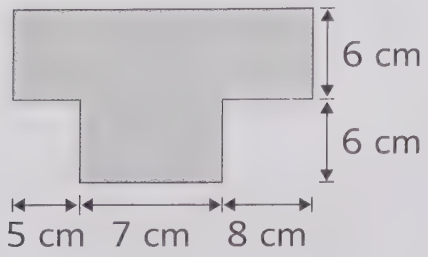
(c)



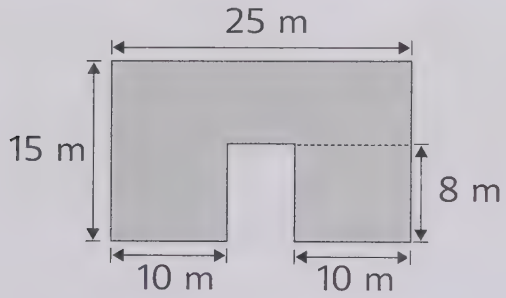
EXERCISE 5

1. Find the area of each of the following figures.
(All the lines meet at right angles.)

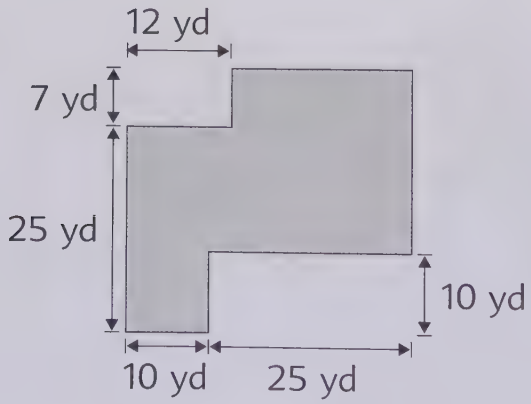
(a)



(b)



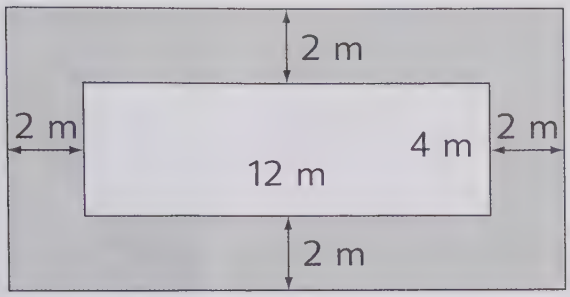
(c)



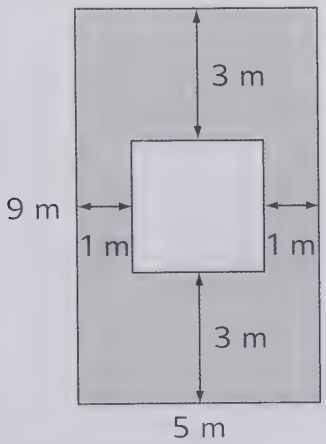
EXERCISE 6

1. Each of the following figures shows a small rectangle in a big rectangle.
   Find the area of the shaded part of each figuure.

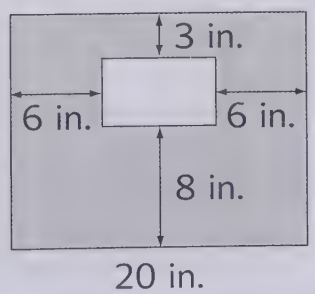
(a)



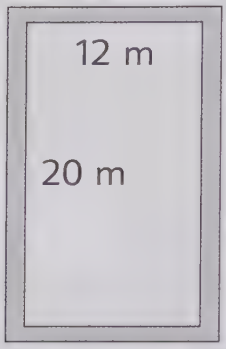
(b)



(c)



2. A rectangular swimming pool measures 20 m by 12 m.
A concrete path 1 m wide is paved around it.
What is the area of the path?



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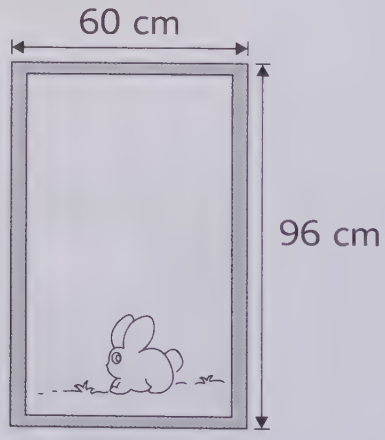
3. A rectangular towel measures 96 cm by 60 cm.
It has a border 3 cm wide around it.
What is the area of the border?



REVIEW 5

1. Write each of the following in figures.

   (a) five thousand, seven hundred three dollars _____

   (b) thirty-four million, eight hundred sixty-four dollars _____

   (c) negative one hundred forty _____

2. When 31,768 is written as 31,800, it is rounded to the nearest _____.

3. The digit **3** in 96,**3**48 stands for 3 × ☐.

4. The number of people who visited an exhibition was 1,535,000, when rounded to the nearest thousand. Which of the following could be the exact number of people who visited the exhibition?
   Circle the number.

   1,534,025 1,534,498 1,534,502 1,535,512

5. Fill in the blanks.

   (a) −4 is 1 less than _____.

   (b) 2 more than −10 is _____.

   (c) 1 is 2 more than _____.

   (d) 2 less than one million is _____.

   (e) 200 less than two hundred million is _____.

6. Fill in each ◯ with >, < or =.

   (a) 6,031,000 ◯ 6,301,009

   (b) −20 ◯ 24

   (c) 5×4 ◯ 7×3

   (d) $1540 + 200$ ◯ $264 - 2000$

   (e) $(37 - 15) \times (8 + 14)$ ◯ 22×24

   (f) $40 \div (12 - 4) + 2$ ◯ $40 \div 10$

7. What number is represented by n?

   (a) $26{,}835 - n = 20{,}000 + 800 + 35$ _____

   (b) $5 \times 24 = 5 \times 6 \times n$ _____

   (c) $2 \times 18 = 4 \times n$ _____

   (d) $16 + 4 \times 8 = n + 32$ _____

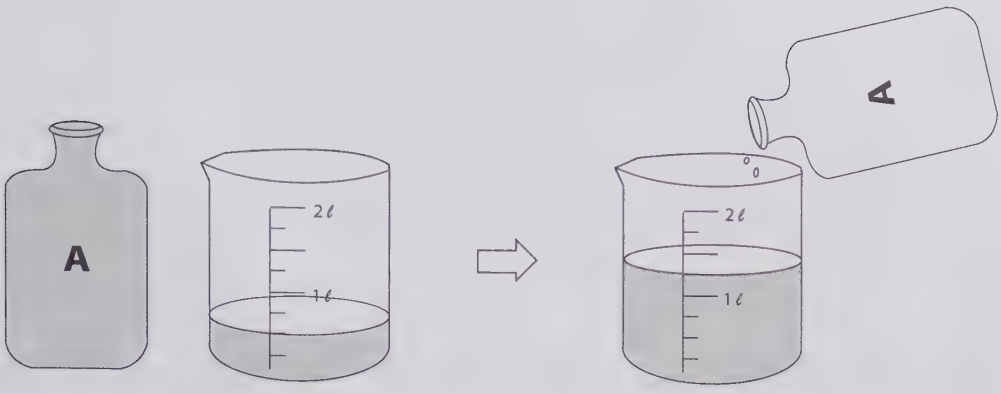
   (e) $12 \div 4 + 9 - 2 = 3 + n$ _____

8. Which one of the following is equal to $4\frac{3}{5}$?

   $\frac{7}{5}, \frac{12}{5}, \frac{23}{5}, \frac{43}{5}$ _____

9. Molly has 35 quarters, 10 dimes, and 5 nickels. What fraction of her coins are dimes?

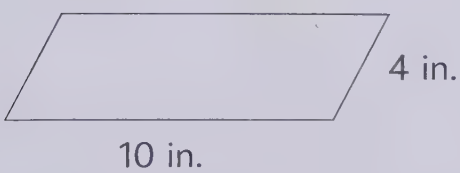
10. What is the capacity of Bottle A? _____



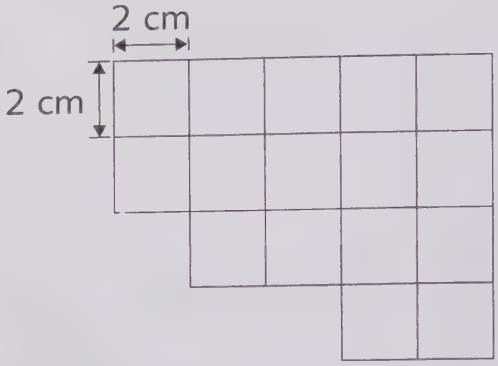
11. Find the perimeter of a square of side 6 cm. _____

12. What is the perimeter of an equilateral triangle of side 14 cm?

13. What is the perimeter of the parallelogram?



14. The figure is made up of 16 squares each of side 2 cm. Find its area. _____



15. The table shows the points scored by 5 students in a test.

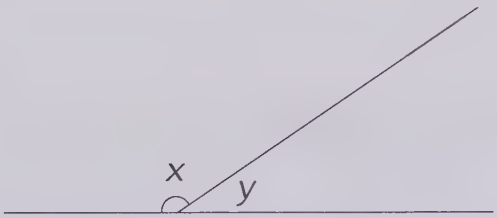
Name	Points
Dani	80
Pablo	60
Peter	70
Mary	90
Morgan	40

(a) Who scored 30 points more than Pablo? _____

(b) Who scored twice as many points as Morgan? _____

16. In each of the following figures, measure $\angle x$ and $\angle y$.

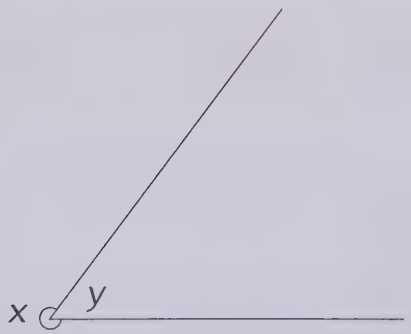
(a)



$\angle x =$ _____

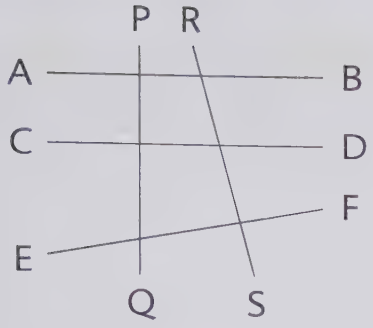
$\angle y =$ _____

(b)



$\angle x =$ _____

$\angle y =$ _____

17. 

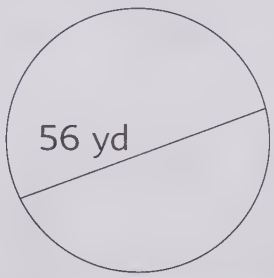
(a) Which line is perpendicular to AB? _____

(b) Which line is parallel to AB? _____

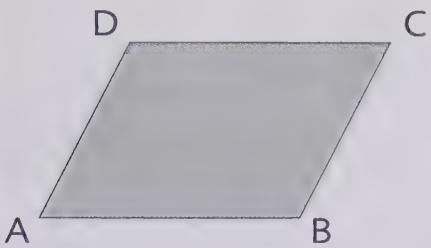
18. The diameter of each circle is given. Find the radius.

(a)

Radius = _____

(b) 

Radius = _____

19. 

Are these properties of a parallelogram correct? Write 'True' or False' in each blank.

(a) DC = BC _____

(b) AB = DC _____

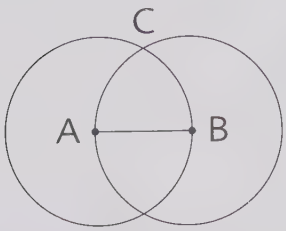
(c) AD is parallel to BDC. _____

(d) DC is parallel to AD. _____

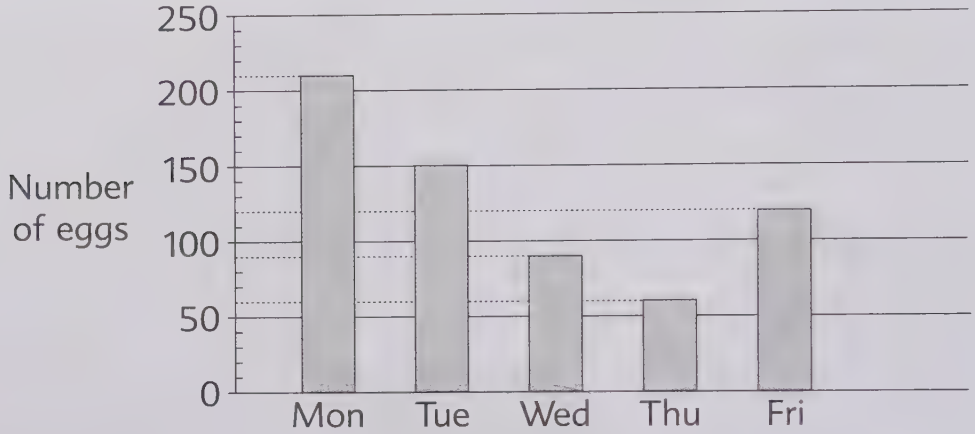
(e) A parallelogram has two pairs of parallel sides. _____

20. If **ΔΔΔΔ** represents 2000, what does each **Δ** represent?

21. A and B are centers of the circles. What kind of triangle will you get if you join points A, B, and C with straight lines?



22. The graph shows the number of eggs Wendy sold in 5 days. Study the graph and answer the questions which follow.

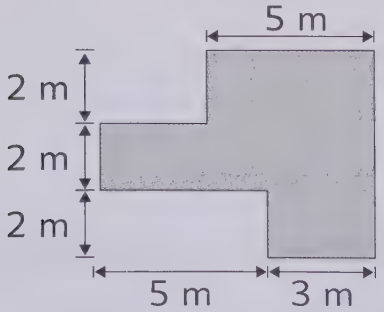


(a) On which day was the smallest number of eggs sold? _____

(b) How many eggs did she sell altogether? _____

23. The area of a square is 64 cm^2. Find the length of a side of the square. _____

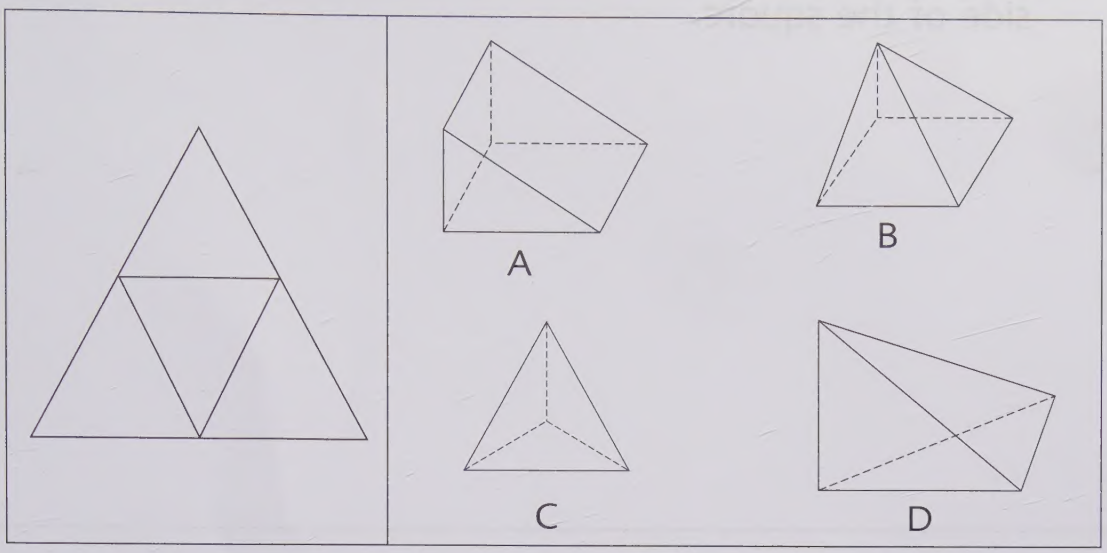
24. Find the perimeter and area of the figure. (All the lines meet at right angles).



Perimeter = _____

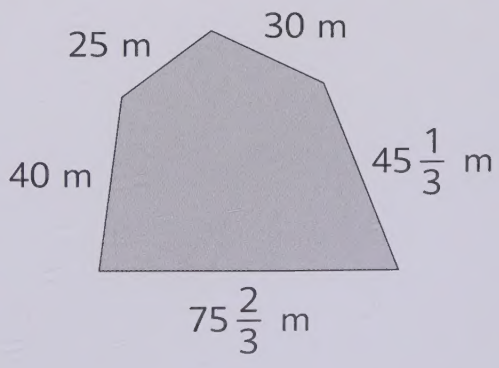
Area = _____

25. Which solid can be formed by the given net? _____



26. A ribbon, 1080 in. long, is cut into two pieces. The length of one piece is 2 times the length of the other. What is the length of the shorter piece?

27. Nicky walked round this pond once. How many meters did he walk?



28. A rectangle and a square have the same area. If the rectangle measures 9 cm by 4 cm, find the length of each side of the square.

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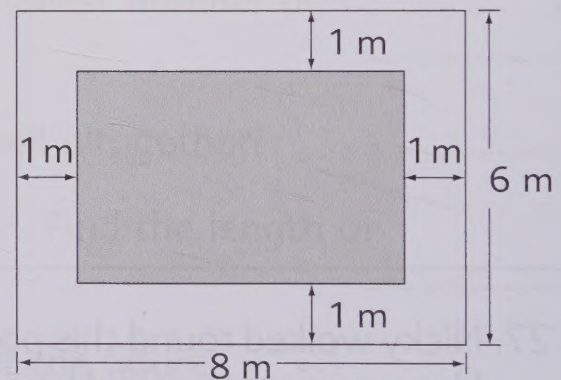
29. A rectangular carpet is placed on the floor of a rectangular room leaving a margin of 1 m around it. If the room measures 8 m by 6 m, find the area of the room **not** covered by the carpet.



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